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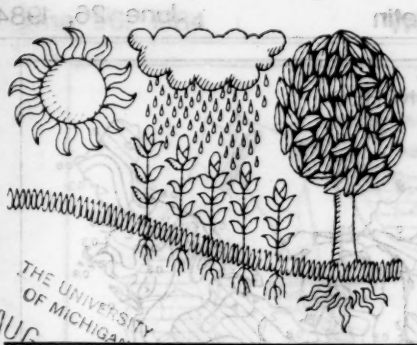

WEEKLY WEATHER AND CROP BULLETIN

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration, National Weather Service

U.S. DEPARTMENT OF AGRICULTURE
Statistical Reporting Service and World Agricultural Outlook Board

Volume 71, No. 25 WASHINGTON, D.C. June 26, 1984

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National Weather Summary

June 17 to 23

HIGHLIGHTS: Showers and thunderstorms were widespread over most of the eastern United States and from the Pacific Northwest to the northern Plains. Severe weather and heavy downpours of rain caused property damage and flooding through the lower Missouri Valley. Beneficial rains fell in the Southeast but some of that area and much of the mid-Atlantic States need more rain. Western portions of Texas had good rains but the rest of the State had little. Average temperatures were warmer than normal from Oklahoma through the Midwest.

SUNDAY...Showers were scattered along the coast of the Gulf of Mexico, in southwestern Texas, and more numerous from the Texas Panhandle and western Oklahoma to South Dakota and Minnesota. Moderate to heavy showers were numerous from eastern Nebraska through the central Great Lakes and through Pennsylvania. Light to moderate rain fell through the mid-Atlantic States.

MONDAY...Temperatures were quite warm through the East and across the South, but were relatively cool in the Northwest, Plateau, and Rockies. Showers and thunderstorms were heavy in parts of western Texas and eastern New Mexico and occasionally produced severe weather. Thunderstorms were scattered from Oklahoma into the Northeast. Heavy rain fell in Pennsylvania, New York, and eastern Ohio.

TUESDAY...Thunderstorms developed from western Texas and New Mexico into Missouri and to Kentucky and Tennessee. Some heavy showers fell in Minnesota and South Dakota. Showers also covered the Pacific Northwest.

WEDNESDAY...Showers and thunderstorms were widespread from the Northwest to the northern Plains, the central Plains, the Ohio Valley, and the Southeast. Slightly cooler weather moved through the Northeast but unusually warm afternoon temperatures covered all but the northern tier of States.

THURSDAY...Showers and thunderstorms continued from the Pacific Northwest through the northern Plains and from the upper Mississippi Valley to the Southeast. Heavy rain in Iowa and Missouri resulted in more flooding.

FRIDAY...Temperatures were very warm through the Plains, while it was quite cool in the Plateau, the Rockies, and the Northeast. Showers, thunderstorms, and severe weather covered the area from the northern and central Plains through the Ohio Valley and the Southeast.

SATURDAY...Isolated thunderstorms and some heavy rain fell from eastern New Mexico to Missouri. More widespread storms covered the area from the lower and central Mississippi Valley to the Appalachians and much of the Southeast.

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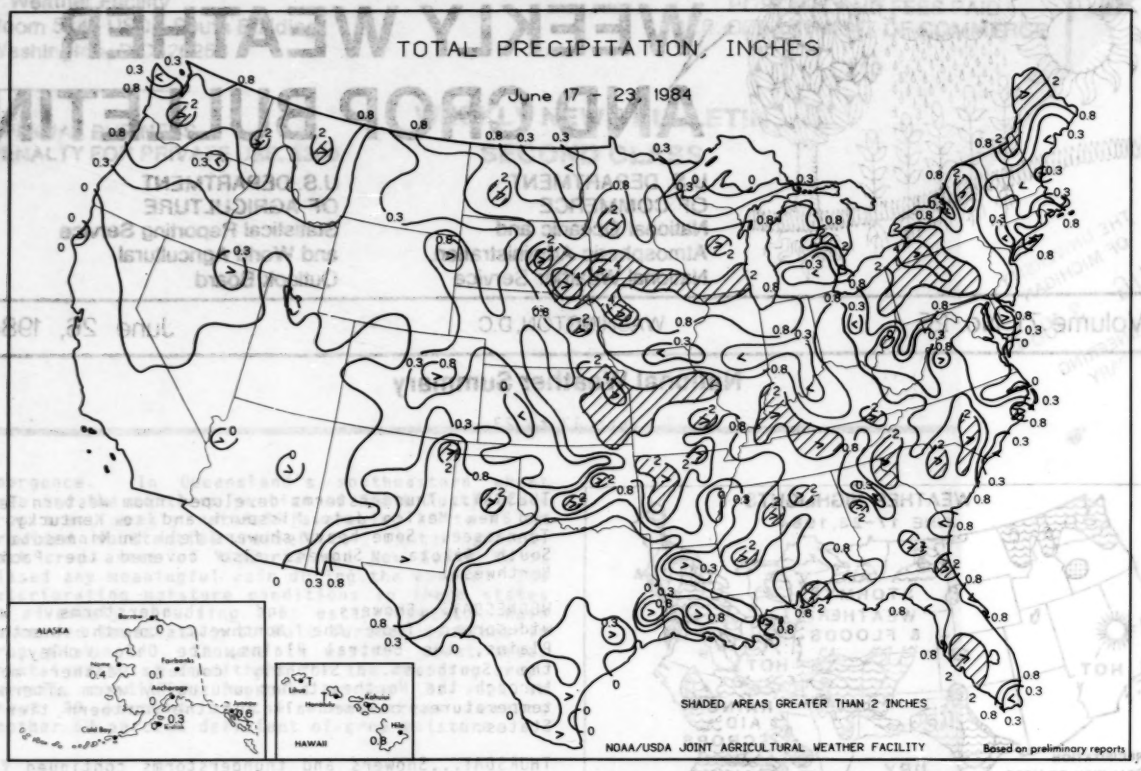
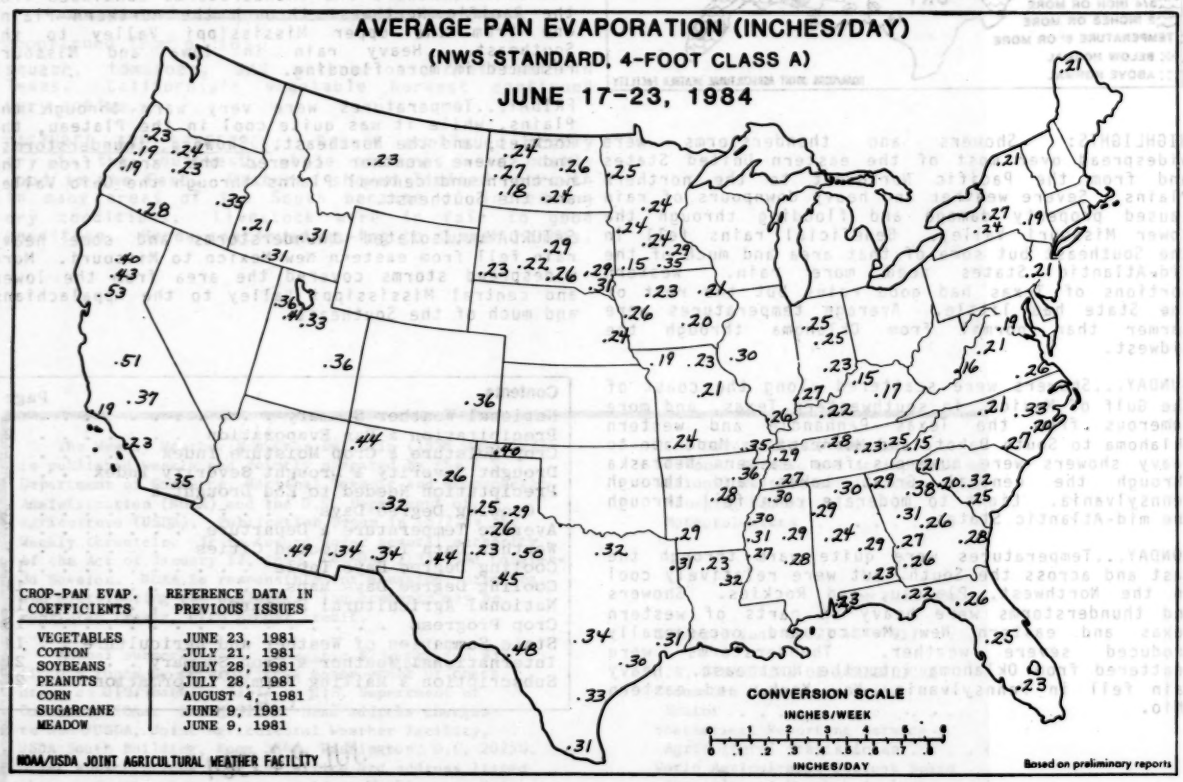
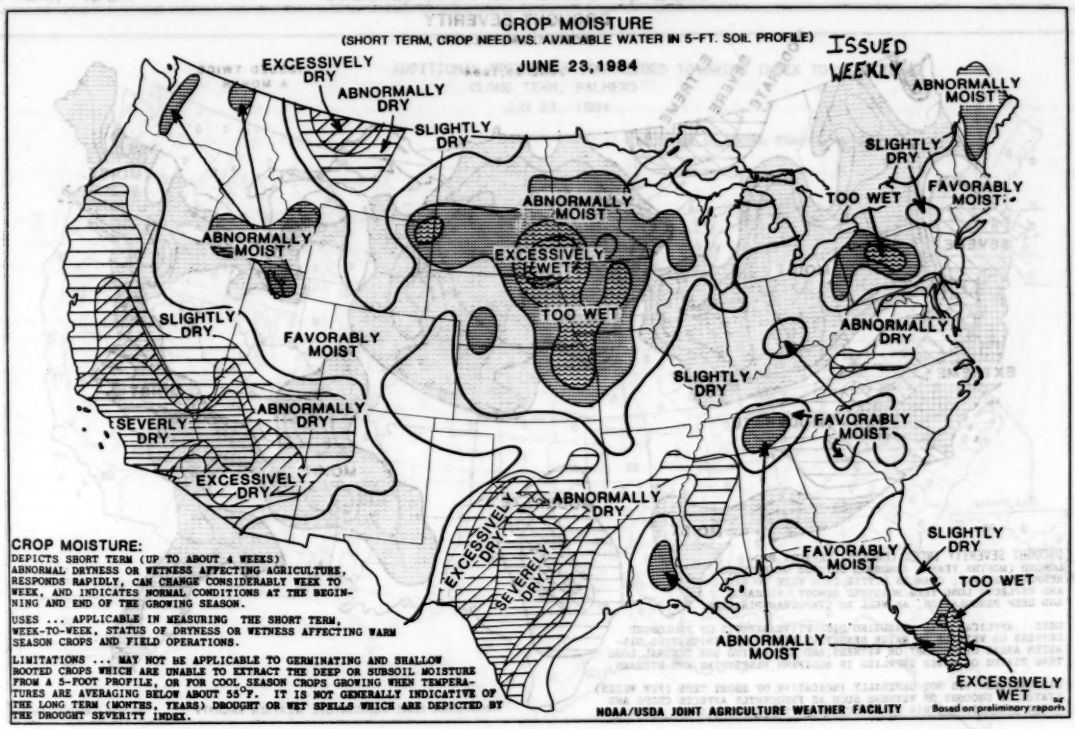
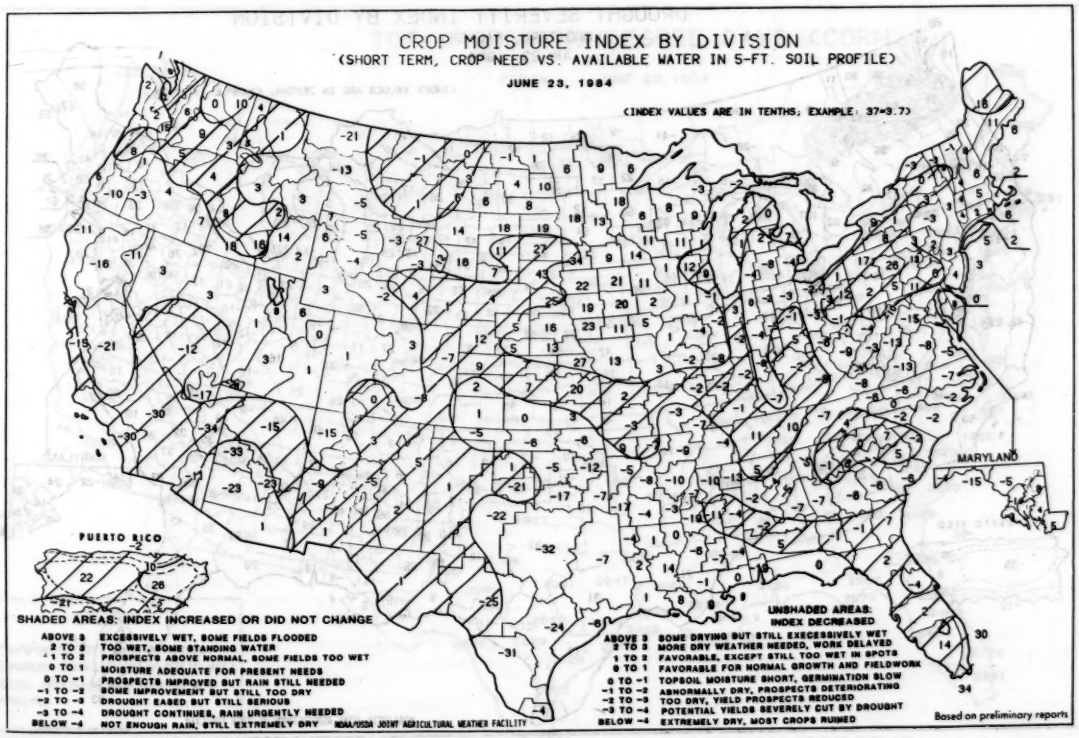
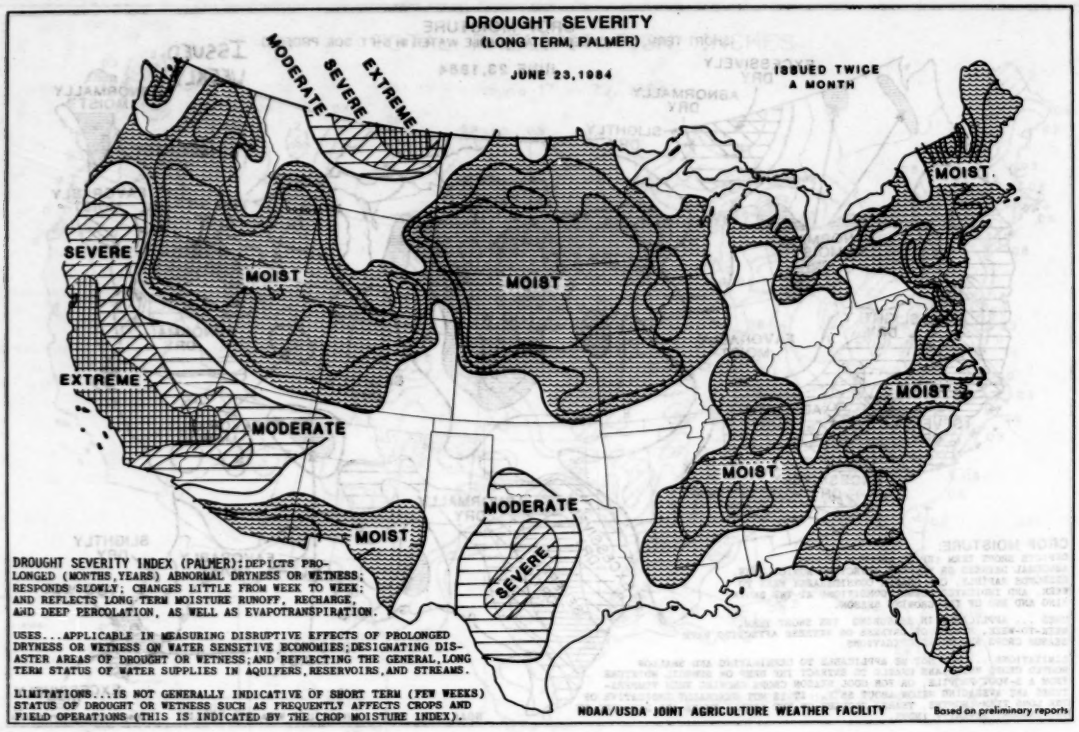


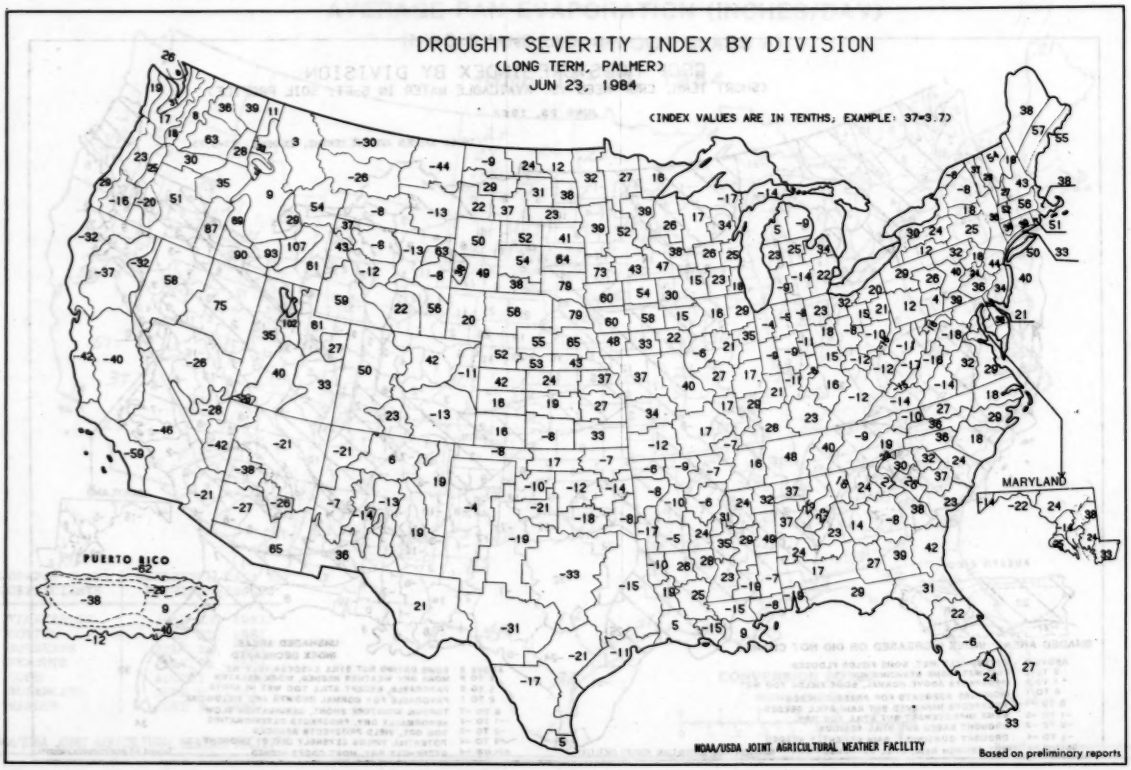


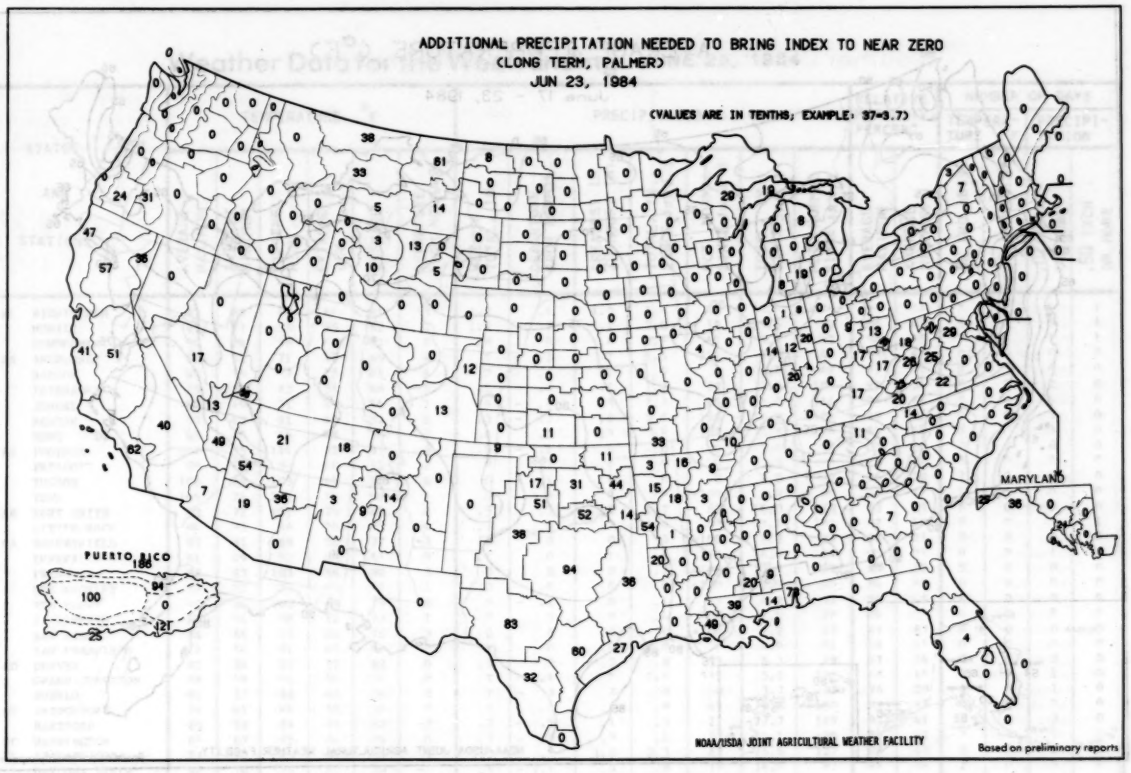
CROP-PAN EVAP. COEFFICIENTS	REFERENCE DATA IN PREVIOUS ISSUES
VEGETABLES	JUNE 23, 1981
COTTON	JULY 21, 1981
SOYBEANS	JULY 28, 1981
PEANUTS	JULY 28, 1981
CORN	AUGUST 4, 1981
SUGARCANE	JUNE 9, 1981
MEADOW	JUNE 9, 1981

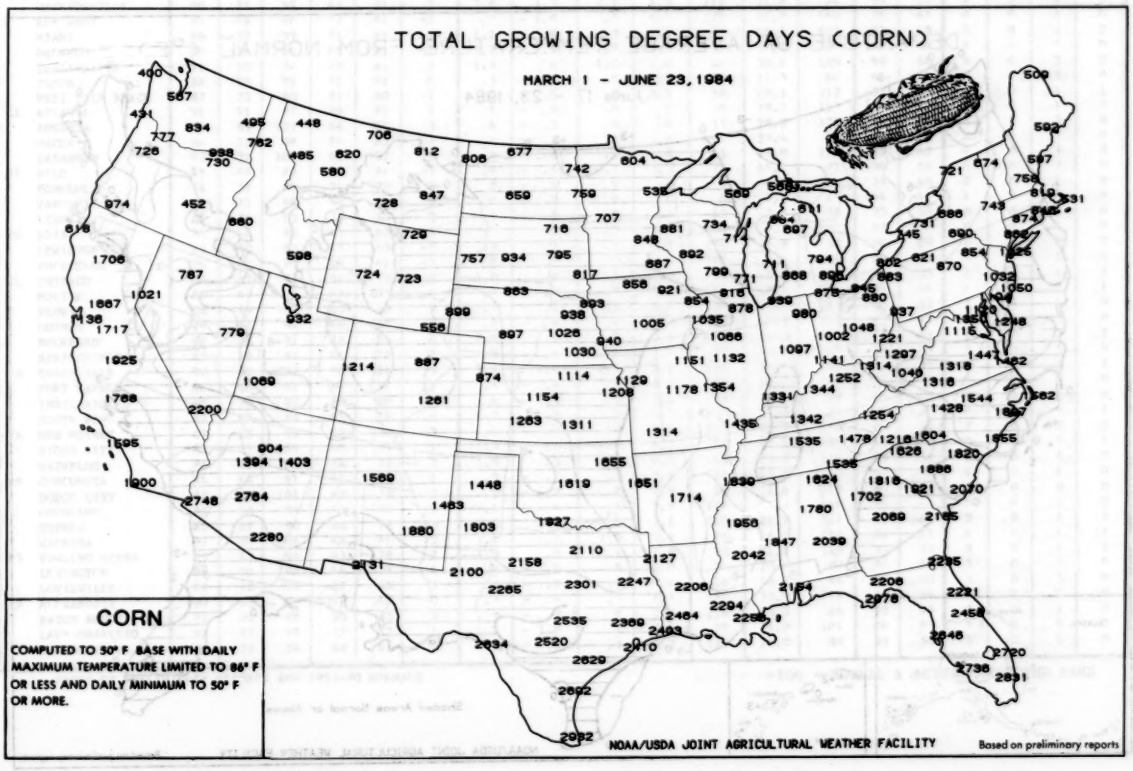

CROP MOISTURE
(SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE)
JUNE 23,1984
ISSUED WEEKLY
EXCESSIVELY DRY
ABNORMALLY DRY
SLIGHTLY DRY
ABNORMALLY MOIST
SLIGHTLY DRY
TOO WET
FAVORABLY MOIST
ABNORMALLY MOIST
EXCESSIVELY WET
TOO WET
SLIGHTLY DRY
FAVORABLY MOIST
ABNORMALLY DRY
SLIGHTLY DRY
ABNORMALLY DRY
SEVERELY DRY
EXCESSIVELY DRY
FAVORABLY MOIST
ABNORMALLY DRY
EXCESSIVELY DRY
SEVERELY DRY
SLIGHTLY DRY
FAVORABLY MOIST
TOO WET
ABNORMALLY MOIST
EXCESSIVELY WET
CROP MOISTURE:
DEPICTS SHORT TERM (UP TO ABOUT 4 WEEKS) ABNORMAL DRYNESS OR WETNESS AFFECTING AGRICULTURE, RESPONDS RAPIDLY, CAN CHANGE CONSIDERABLY WEEK TO WEEK, AND INDICATES NORMAL CONDITIONS AT THE BEGINNING AND END OF THE GROWING SEASON.
USES ... APPLICABLE IN MEASURING THE SHORT TERM, WEEK-TO-WEEK, STATUS OF DRYNESS OR WETNESS AFFECTING WARM SEASON CROPS AND FIELD OPERATIONS.
LIMITATIONS ... MAY NOT BE APPLICABLE TO GERMINATING AND SHALLOW ROOTED CROPS WHICH ARE UNABLE TO EXTRACT THE DEEP OR SUBSOIL MOISTURE FROM A 5-FOOT PROFILE, OR FOR COOL SEASON CROPS GROWING WHEN TEMPERATURES ARE AVERAGING BELOW ABOUT 55°F. IT IS NOT GENERALLY INDICATIVE OF THE LONG TERM (MONTHS, YEARS) DROUGHT OR WET SPELLS WHICH ARE DEPICTED BY THE DROUGHT SEVERITY INDEX.
NOAA/USDA JOINT AGRICULTURE WEATHER FACILITY
Based on preliminary reports

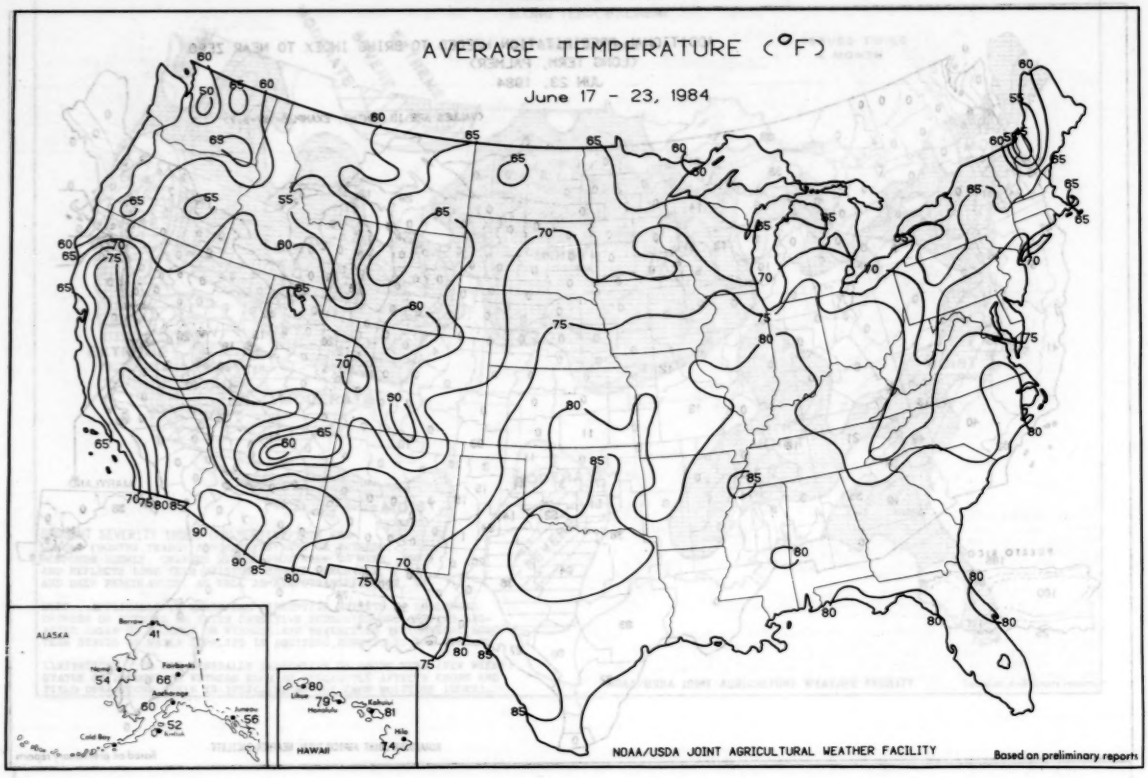

CROP MOISTURE INDEX BY DIVISION
(SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE)
JUNE 23, 1984
(INDEX VALUES ARE IN TENTHS; EXAMPLE: 37=3.7)
MARYLAND
PUERTO RICO
SHADED AREAS: INDEX INCREASED OR DID NOT CHANGE
ABOVE 3 EXCESSIVELY WET, SOME FIELDS FLOODED
2 TO 3 TOO WET, SOME STANDING WATER
1 TO 2 PROSPECTS ABOVE NORMAL, SOME FIELDS TOO WET
0 TO 1 MOISTURE ADEQUATE FOR PRESENT NEEDS
0 TO -1 PROSPECTS IMPROVED BUT RAIN STILL NEEDED
-1 TO -2 SOME IMPROVEMENT BUT STILL TOO DRY
-2 TO -3 DROUGHT EASED BUT STILL SERIOUS
-3 TO -4 DROUGHT CONTINUES, RAIN URGENTLY NEEDED
BELOW -4 NOT ENOUGH RAIN, STILL EXTREMELY DRY
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
UNSHADED AREAS: INDEX DECREASED
ABOVE 3 SOME DRYING BUT STILL EXCESSIVELY WET
2 TO 3 MORE DRY WEATHER NEEDED, WORK DELAYED
1 TO 2 FAVORABLE, EXCEPT STILL TOO WET IN SPOTS
0 TO 1 FAVORABLE FOR NORMAL GROWTH AND FIELDWORK
0 TO -1 TOPSOIL MOISTURE SHORT, GERMINATION SLOW
-1 TO -2 ABNORMALLY DRY, PROSPECTS DETERIORATING
-2 TO -3 TOO DRY, YIELD PROSPECTS REDUCED
-3 TO -4 POTENTIAL YIELDS SEVERELY CUT BY DROUGHT
BELOW -4 EXTREMELY DRY, MOST CROPS RUINED
Based on preliminary reports

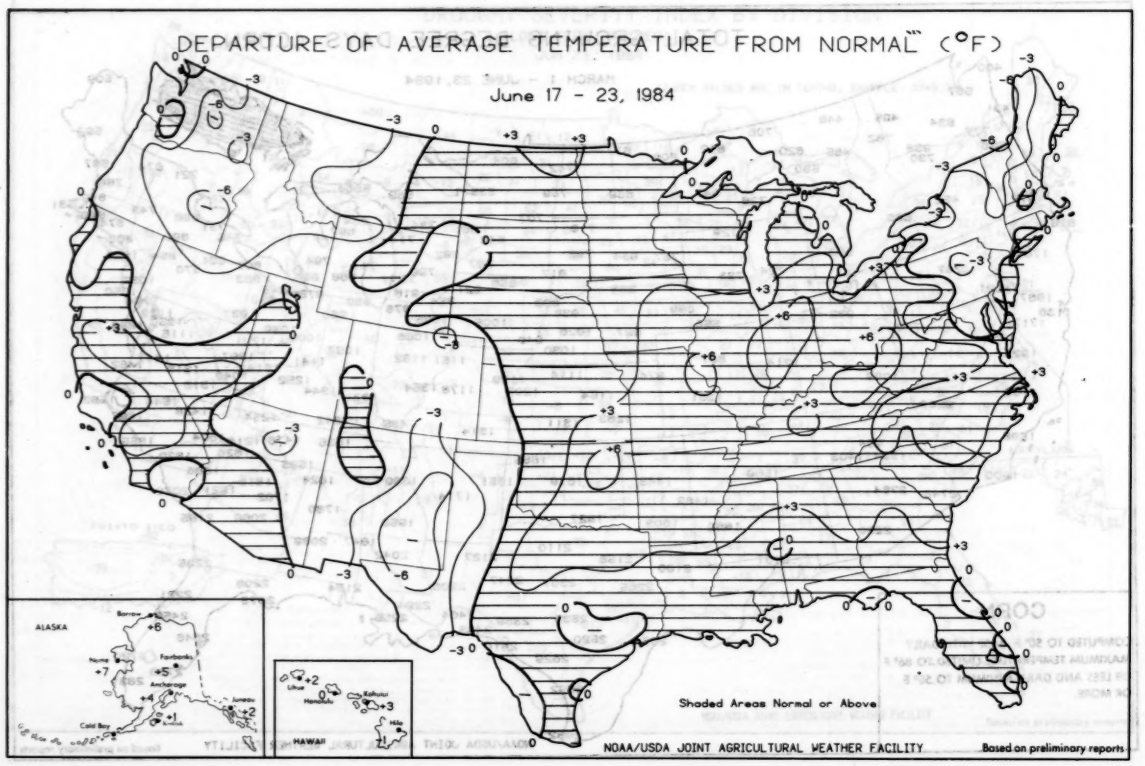

DROUGHT SEVERITY
(LONG TERM, PALMER)
JUNE 23,1984
ISSUED TWICE A MONTH
MODERATE
SEVERE
EXTREME
MOIST
SEVERE
MOIST
MOIST
MOIST
EXTREME
MODERATE
MOIST
MOIST
MODERATE
MOIST
SEVERE
DROUGHT SEVERITY INDEX (PALMER): DEPICTS PROLONGED (MONTHS, YEARS) ABNORMAL DRYNESS OR WETNESS; RESPONDS SLOWLY; CHANGES LITTLE FROM WEEK TO WEEK; AND REFLECTS LONG TERM MOISTURE RUNOFF, RECHARGE, AND DEEP PERCOLATION, AS WELL AS EVAPOTRANSPIRATION.
USES...APPLICABLE IN MEASURING DISRUPTIVE EFFECTS OF PROLONGED DRYNESS OR WETNESS ON WATER SENSETIVE ECONOMIES; DESIGNATING DISASTER AREAS OF DROUGHT OR WETNESS; AND REFLECTING THE GENERAL, LONG TERM STATUS OF WATER SUPPLIES IN AQUIFERS, RESERVOIRS, AND STREAMS.
LIMITATIONS...IS NOT GENERALLY INDICATIVE OF SHORT TERM (FEW WEEKS) STATUS OF DROUGHT OR WETNESS SUCH AS FREQUENTLY AFFECTS CROPS AND FIELD OPERATIONS (THIS IS INDICATED BY THE CROP MOISTURE INDEX).
NOAA/USDA JOINT AGRICULTURE WEATHER FACILITY
Based on preliminary reports


DROUGHT SEVERITY INDEX BY DIVISION
(LONG TERM, PALMER)
JUN 23, 1984
(INDEX VALUES ARE IN TENTHS; EXAMPLE: 37=3.7)
MARYLAND
PUERTO RICO
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


ADDITIONAL PRECIPITATION NEEDED TO BRING INDEX TO NEAR ZERO
(LONG TERM, PALMER)
JUN 23, 1984
(VALUES ARE IN TENTHS; EXAMPLE: 37=3.7)
PUERTO RICO
MARYLAND
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


TOTAL GROWING DEGREE DAYS (CORN)
MARCH 1 - JUNE 23, 1984
CORN
COMPUTED TO 50° F BASE WITH DAILY MAXIMUM TEMPERATURE LIMITED TO 86° F OR LESS AND DAILY MINIMUM TO 50° F OR MORE.
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


AVERAGE TEMPERATURE (°F)
June 17 - 23, 1984
ALASKA
HAWAII
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


DEPARTURE OF AVERAGE TEMPERATURE FROM NORMAL (°F)
June 17 - 23, 1984
ALASKA
HAWAII
Shaded Areas Normal or Above
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports

Weather Data for the Week Ending JUNE 23, 1984

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																TEMPERATURE °F		PRECIPITATION	
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE June 3	PCT. NORMAL SINCE June 3	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	93	68	96	66	81	3	1.2	.4	1.0	1.4	58	25.6	88	97	61	7	0	4	1
MOBILE	92	71	96	69	82	1	1.9	.7	1.1	2.0	59	25.5	83	88	49	5	0	5	1
MONTGOMERY	94	70	98	67	82	2	.8	0	.8	1.5	63	23.9	93	94	45	7	0	2	1
AK ANCHORAGE	68	51	71	48	60	4	T	- .3	T	1.5	214	5.6	144	67	45	0	0	0	0
BARROW	47	35	57	32	41	6	T	- .1	T	0	0	.8	62	91	71	0	1	0	0
FAIRBANKS	79	53	82	51	66	5	.1	- .2	.1	.2	22	3.6	106	92	34	0	0	2	0
JUNEAU	62	49	71	46	56	2	.6	- .1	.3	1.7	85	22.2	116	95	66	0	0	6	0
KODIAK	57	47	61	40	52	1	.3	- .3	.2	2.4	109	39.2	115	98	81	0	0	3	0
NOME	63	45	68	38	54	2	.4	- .1	.2	.8	100	3.2	78	87	55	0	0	3	0
AZ PHOENIX	107	75	111	72	91	3	0	- .1	0	0	0	1.4	58	23	10	7	0	0	0
PRESCOTT	89	52	96	48	71	2	0	- .2	0	0	0	.3	5	37	11	3	0	0	0
TUCSON	100	69	103	65	85	0	0	- .1	0	0	0	1.0	42	26	10	7	0	0	0
YUMA	105	74	107	71	90	1	0	0	0	0	+100	.9	60	41	12	7	0	0	0
AR FORT SMITH	93	72	101	70	82	4	.5	- .3	.5	1.7	63	16.0	79	93	49	6	0	2	0
LITTLE ROCK	94	73	98	70	83	4	.7	0	.7	1.6	67	23.1	91	87	49	7	0	2	1
CA BAKERSFIELD	93	61	99	56	77	-3	0	0	0	0	+100	1.2	29	52	21	5	0	0	0
EUREKA	61	49	62	46	55	0	.1	0	.1	.6	150	16.6	76	95	75	0	0	1	0
FRESNO	96	63	103	56	80	3	0	0	0	.2	+100	2.0	29	60	18	5	0	0	0
LOS ANGELES	72	62	73	60	67	1	0	0	0	0	+100	1.7	20	84	60	0	0	0	0
RED BLUFF	94	64	100	58	79	2	0	- .1	0	.1	25	4.2	32	50	18	4	0	0	0
SACRAMENTO	89	56	98	52	73	1	0	0	0	.1	100	3.0	28	74	33	4	0	0	0
SAN DIEGO	74	66	77	64	70	3	0	0	0	0	+100	1.2	19	87	67	0	0	0	0
SAN FRANCISCO	72	50	81	49	61	0	0	0	0	0	0	4.0	31	84	65	0	0	0	0
CO DENVER	82	54	89	52	68	0	.3	0	.3	.8	73	6.3	79	77	24	0	0	2	0
GRAND JUNCTION	88	59	91	56	74	0	T	- .1	T	1.4	533	5.3	151	68	16	3	0	1	0
PUEBLO	91	57	98	49	74	0	T	- .3	T	0	0	3.7	77	76	20	4	0	1	0
CT BRIDGEPORT	78	61	86	59	70	0	.5	- .2	.4	.9	45	23.4	120	89	51	0	0	2	0
HARTFORD	80	55	86	49	68	-2	.3	- .5	.1	.5	21	27.7	129	92	41	0	0	2	0
DC WASHINGTON	85	67	92	64	76	0	.3	- .5	.3	.4	17	19.1	108	85	47	2	0	1	0
FL APALACHICOLA	87	71	89	66	79	-1	1.5	.2	1.0	2.3	68	26.6	127	89	66	0	0	2	1
DAYTONA BEACH	88	70	95	67	79	-1	.5	- 1.1	.4	.8	18	16.7	87	88	58	2	0	3	0
JACKSONVILLE	90	71	95	67	81	1	2.8	1.5	2.1	4.5	118	21.6	94	99	55	4	0	4	2
KEY WEST	85	78	88	73	81	-2	.9	- 1.0	.9	6.9	172	22.7	160	70	63	0	0	1	0
MIAMI	89	72	92	71	81	-1	1.2	- .9	.7	5.4	83	28.1	123	90	49	3	0	2	2
ORLANDO	89	72	94	69	81	-1	1.3	- .6	.5	1.6	31	17.7	88	100	58	3	0	5	0
TALLAHASSEE	91	70	94	68	81	1	1.6	0	1.0	1.8	40	32.4	109	99	56	6	0	2	2
TAMPA	88	75	91	72	82	0	.3	- 1.0	.2	1.0	28	11.3	66	94	61	2	0	3	0
WEST PALM BEACH	87	73	90	71	80	-1	.9	- 1.0	.8	3.2	58	28.1	117	95	63	1	0	4	1
GA ATLANTA	92	71	97	69	82	5	T	- .8	T	0	0	20.7	113	81	41	5	0	1	0
AUGUSTA	94	69	101	66	81	3	.4	- .5	.4	.4	15	28.8	125	89	42	5	0	3	0
MACON	94	71	98	70	83	3	.5	- .4	.3	.5	19	23.4	96	84	40	5	0	2	0
SAVANNAH	93	72	101	66	82	3	.4	- 1.0	.3	.6	15	27.0	121	89	47	4	0	3	0
HI HILO	81	68	82	66	74	-1	.8	- .6	.2	3.2	78	45.2	71	90	56	0	0	2	0
HONOLULU	86	72	87	71	79	0	T	- .1	T	0	0	4.8	37	79	45	0	0	1	0
KAHULUI	88	73	90	69	81	3	0	- .1	0	0	0	5.4	43	64	42	1	0	0	0
LIHUE	84	76	85	73	80	2	T	- .3	T	.4	40	7.3	33	73	55	0	0	1	0
ID BOISE	76	48	83	43	62	-5	.2	0	.2	1.4	200	7.3	101	83	30	0	0	2	0
LEWISTON	75	50	85	47	63	-5	.5	.1	.3	1.5	136	6.8	97	84	39	0	0	2	0
POCATELLO	76	47	85	40	62	-2	T	- .2	T	1.3	163	7.4	121	70	23	0	0	1	0
IL CHICAGO	83	63	92	56	73	3	1.0	0	.7	1.6	55	15.7	99	90	55	1	0	4	1
MOLINE	88	67	93	60	77	5	.7	- .3	.7	3.7	123	18.2	105	85	46	1	0	2	1
PEORIA	88	69	92	65	78	6	.7	- .2	.5	2.8	104	19.7	117	84	53	2	0	1	0
QUINCY	89	71	94	68	80	6	.1	- .8	.1	3.6	129	19.7	113	87	48	2	0	2	0
ROCKFORD	86	64	91	58	75	4	2.0	.9	1.2	3.9	122	14.9	88	92	54	1	0	3	2
SPRINGFIELD	87	69	92	66	78	3	.3	- .6	.1	2.2	85	20.6	122	96	55	2	0	3	0
IN EVANSVILLE	90	72	95	70	81	5	3.1	2.4	1.9	3.3	143	22.7	105	87	52	4	0	3	3
FORT WAYNE	88	66	91	60	77	6	.5	- .4	.4	1.4	54	15.6	92	87	46	2	0	2	0
INDIANAPOLIS	90	70	92	68	80	7	.1	- .9	.1	1.1	39	16.7	87	85	48	5	0	1	0
SOUTH BEND	83	67	89	63	75	5	1.7	.7	1.3	3.0	103	15.7	88	76	47	0	0	3	1
IA DES MOINES	87	65	93	62	76	3	.4	- .6	.2	7.7	257	23.2	154	89	50	2	0	2	0
SIOUX CITY	83	63	89	60	73	1	1.7	.7	1.1	6.8	224	22.3	184	91	50	0	0	5	1
WATERLOO	84	62	86	54	73	2	1.5	.5	.7	4.3	148	16.8	110	99	58	0	0	4	2
KS CONCORDIA	85	66	91	61	76	1	.3	- .7	.2	3.8	127	17.9	140	93	58	1	0	4	0
DODGE CITY	89	68	101	62	79	2	0	- .7	0	1.8	86	11.4	110	85	41	3	0	0	0
GOODLAND	82	58	89	53	70	-2	.1	- .6	.1	3.7	152	17.3	145	91	43	0	0	1	0
TOPEKA	85	67	90	64	76	0	5.0	3.8	3.6	7.4	200	21.1	141	94	62	2	0	4	2
WICHITA	92	70	101	68	81	3	1.1	.2	1.0	2.2	74	16.3	123	84	41	4	0	4	1
KY BOWLING GREEN	89	67	94	63	78	2	1.8	.8	1.1	1.8	58	31.0	119	97	55	3	0	4	2
LEXINGTON	88	70	92	66	79	6	.6	- .4	.5	1.0	34	20.6	87	96	50	3	0	3	0
LOUISVILLE	89	70	93	67	80	5	.2	- .6	.1	.4	16	19.3	86	83	50	3	0	3	0
LA ALEXANDRIA	90	73	93	71	82	0	.2	- .7	.2	6.5	232	33.0	112	80	56	5	0	2	0
BATON ROUGE	92	73	94	70	83	2	T	- .7	T	2.2	116	18.3	68	92	48	7	0	1	0
LAKE CHARLES	91	73	92	72	82	1	T	- 1.0	T	2.1	72	24.0	101	96	55	5	0	0	0
NEW ORLEANS	90	73	94	68	81	0	.3	- .8	.3	5.3	171	24.9	88	93	56	5	0	1	0

BASED ON PRELIMINARY REPORTS AND 1951-80 NORMALS

+100 = NORMAL & ACTUAL NEAR THE SAME

Weather Data for the Week Ending JUNE 23, 1984

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																	TEMPERATURE °F		PRECIPITATION	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE June 3	PCT. NORMAL SINCE June 3	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
	SHREVEPORT	93	71	96	69	82	1	0	- .8	0	2.9	171	22.4	95	92	68	7	0	0	0
ME	CARIBOU	70	50	79	43	60	-2	1.9	1.1	1.2	2.8	122	18.3	121	82	41	0	0	3	2
	PORTLAND	75	57	79	45	63	-1	.1	- .6	.1	.4	18	20.1	130	83	44	0	0	1	0
MD	BALTIMORE	82	63	90	58	72	-1	.2	- .7	.2	.3	12	19.1	98	85	49	1	0	3	0
	SALISBURY	82	63	86	58	73	0	.0	.1	.5	1.6	64	26.2	128	90	60	0	0	3	1
MA	BOSTON	77	61	91	56	69	-1	.1	- .5	.1	.2	10	32.0	149	89	47	1	0	3	0
	CHATHAM	68	56	74	55	62	-1	.7	0	.7	.8	40	25.5	113	--	--	0	0	1	1
MI	ALPENA	74	49	78	39	61	-2	.8	0	.4	2.5	109	11.4	86	98	53	0	0	3	0
	DETROIT	84	62	90	56	73	4	.1	- .8	.1	.6	24	12.6	83	82	50	1	0	1	0
	FLINT	83	61	88	54	72	4	.1	- .7	.1	.6	25	11.2	81	88	48	0	0	2	0
	GRAND RAPIDS	83	62	90	57	73	4	.3	- .7	.2	.4	14	12.1	77	85	52	1	0	2	0
	HOUGHTON LAKE	78	55	79	47	66	2	.9	.1	.8	1.3	59	9.4	75	95	48	0	0	2	1
	LANSING	84	61	89	54	72	4	T	- .8	T	.2	8	10.8	78	91	46	0	0	1	0
	MARQUETTE	74	50	81	37	62	1	T	- .9	T	1.4	52	13.7	78	92	53	0	0	0	0
	MUSKEGON	79	59	84	56	69	2	1.3	.7	1.0	1.4	74	13.4	91	93	56	0	0	4	1
	SAULT STE. MARIE	73	49	81	43	61	1	.1	- .7	.1	1.3	54	9.9	71	96	53	0	0	2	0
MN	ALEXANDRIA	75	59	81	55	67	0	2.2	1.2	.9	6.6	228	14.6	128	98	60	0	0	4	3
	DULUTH	72	52	78	46	62	1	1.3	.3	1.1	5.2	186	11.6	92	90	54	0	0	4	1
	INT'L FALLS	75	52	78	45	63	1	.7	- .3	.5	6.1	235	9.9	103	95	55	0	0	4	0
	MINNEAPOLIS	80	62	82	54	71	1	.5	- .5	.4	7.6	262	17.5	148	93	55	0	0	2	0
	ROCHESTER	78	58	80	51	68	0	1.1	.1	.9	3.6	129	13.4	108	94	57	0	0	4	1
MS	GREENWOOD	93	72	96	70	83	2	.3	- .4	.2	.5	23	24.1	83	90	44	7	0	3	0
	JACKSON	94	70	95	67	82	2	2.4	1.7	1.0	2.5	125	24.3	85	97	47	7	0	5	2
	MERIDIAN	92	65	94	63	79	-1	.5	- .4	.5	1.6	67	23.9	84	95	46	5	0	1	0
MO	CAPE GIRARDEAU	93	73	96	70	83	--	.7	- .1	.4	.8	32	17.9	78	94	49	6	0	2	1
	COLUMBIA	86	70	90	67	78	3	2.5	1.6	1.8	6.4	237	25.2	136	97	66	1	0	4	2
	KANSAS CITY	85	69	90	67	77	2	1.0	- .1	.7	4.1	124	19.7	125	80	53	2	0	4	1
	SAINT LOUIS	91	75	94	70	83	6	2.2	1.3	2.1	2.4	96	23.4	134	86	50	5	0	3	1
	SPRINGFIELD	88	70	94	67	79	4	1.1	0	.8	3.0	91	19.9	102	90	57	2	0	4	1
MT	BILLINGS	78	52	85	48	65	0	.4	0	.2	1.6	114	6.2	72	80	30	0	0	4	0
	GLASGOW	76	54	82	49	65	0	.3	- .3	.2	1.0	106	4.1	71	87	42	0	0	4	0
	GREAT FALLS	71	45	78	41	58	-5	.6	0	.4	2.5	125	7.3	80	83	34	0	0	3	0
	HAVRE	73	48	82	43	61	-6	.1	- .4	.1	.6	38	3.3	56	84	33	0	0	2	0
	HELENA	72	48	77	42	60	-2	1.0	.5	.5	2.2	147	5.5	89	81	38	0	0	3	1
	KALISPELL	70	44	76	37	57	-2	.0	.4	.7	1.7	113	7.5	90	96	42	0	0	3	1
	MILES CITY	82	55	89	50	69	1	1.0	.3	.6	3.6	171	5.8	76	90	32	0	0	3	1
	MISSOULA	72	43	77	38	57	-4	.8	.4	.5	1.4	108	8.2	100	91	35	0	0	3	1
NE	GRAND ISLAND	86	66	88	61	76	2	.4	- .4	.2	3.7	142	22.3	180	83	45	0	0	3	0
	LINCOLN	85	66	89	61	75	1	1.0	.1	.4	5.1	189	25.4	187	96	59	0	0	3	0
	NORFOLK	85	63	92	58	74	2	1.9	.9	1.2	5.5	172	22.4	182	92	49	1	0	3	1
	NORTH PLATTE	84	58	91	51	71	1	.8	- .1	.7	4.6	170	14.0	143	76	30	1	0	3	1
	OMAHA	83	66	90	61	75	2	.4	- .6	.2	7.0	233	22.8	161	90	58	1	0	2	0
	SCOTTSBLUFF	84	54	94	48	69	0	.1	- .6	T	1.7	57	8.8	105	83	25	1	0	2	0
	VALENTINE	84	57	94	49	71	1	.4	- .3	.3	2.1	100	8.9	102	72	34	1	0	2	0
NV	ELY	82	40	85	36	61	0	T	- .2	T	.4	67	3.6	71	68	17	0	0	0	0
	LAS VEGAS	99	71	101	68	85	0	0	0	0	0	+100	T	0	18	5	7	0	0	0
	RENO	83	44	89	40	63	-1	T	0	T	.4	200	1.6	36	73	17	0	0	1	0
	WINNEMUCCA	82	44	87	39	63	-2	.1	- .2	.1	1.4	175	6.5	138	81	17	0	0	1	0
NH	CONCORD	78	51	88	41	64	-2	.1	- .7	.1	.8	36	25.0	152	80	38	0	0	1	0
NJ	ATLANTIC CITY	81	61	90	55	71	1	.8	.1	.4	.9	47	24.6	126	86	47	1	0	3	0
NM	ALBUQUERQUE	90	61	94	56	76	-1	.3	.2	.3	.3	150	1.9	86	66	16	3	0	2	0
	CLOVIS	80	62	90	60	71	-4	.7	.1	.4	3.7	206	8.6	132	95	56	1	0	3	0
	ROSWELL	84	64	93	60	74	-7	1.5	1.3	.9	3.2	533	6.2	230	89	45	2	0	2	2
NY	ALBANY	75	53	80	47	64	-4	.3	- .5	.3	1.2	52	20.8	126	94	56	0	0	1	0
	BINGHAMTON	75	55	79	49	65	-1	.8	0	.7	1.3	50	19.7	113	87	52	0	0	2	1
	BUFFALO	78	57	83	50	67	0	3.1	2.5	1.1	4.3	239	18.1	112	89	47	0	0	3	2
	NEW YORK	78	63	86	60	71	-2	.4	- .3	.4	1.2	57	26.6	133	92	57	0	0	3	0
	ROCHESTER	76	55	84	47	65	-3	1.1	.4	.5	1.1	55	16.5	113	96	49	0	0	3	1
	SYRACUSE	77	53	82	46	65	-3	.2	- .7	.2	1.2	48	15.8	88	93	47	0	0	1	0
NC	ASHEVILLE	81	62	89	60	72	1	2.1	1.1	1.5	2.4	80	26.3	111	100	69	0	0	5	1
	CHARLOTTE	87	69	95	66	78	2	.3	- .5	.2	1.5	63	26.5	121	84	48	3	0	5	0
	GREENSBORO	85	67	93	64	76	2	.4	- .6	.3	.6	21	23.7	116	84	51	2	0	3	0
	HATTERAS	86	73	92	70	79	4	.2	- .8	.2	.2	.7	20.8	89	87	55	1	0	1	0
	NEW BERN	91	74	97	71	83	6	.6	- .7	.6	.6	17	27.3	118	81	48	4	0	1	1
	RALEIGH	87	67	94	62	77	2	.9	0	.8	1.2	46	27.1	133	95	53	2	0	2	1
	WILMINGTON	89	72	98	70	81	3	.2	- 1.2	.1	.5	13	22.1	96	89	54	3	0	2	0
ND	BISMARCK	77	55	83	48	66	0	.8	.1	.4	3.4	155	9.7	126	91	50	0	0	3	0
	FARGO	77	60	81	55	68	2	.3	- .5	.2	5.3	241	10.6	125	86	50	0	0	4	0
	GRAND FORKS	78	59	82	54	68	3	.2	- .5	.2	5.4	257	9.0	129	88	49	0	0	1	0
	WILLISTON	76	54	80	43	65	0	.7	.1	.4	1.9	100	5.5	81	89	39	0	0	3	0
OH	AKRON-CANTON	82	63	90	55	73	3	.8	.1	.8	1.3	59	16.8	97	84	50	1	0	2	1
	CINCINNATI	88	66	93	63	77	5	1.7	.7	.9	1.8	62	18.1	88	92	51	2	0	3	1
	CLEVELAND	81	63	89	55	72	3	1.2	.3	1.1	3.2	133	20.3	117	79	48	0	0	3	1
	COLUMBUS	86	66	93	61	76	4	.1	- .9	.1	.6	21	15.4	82	85	44	2	0	2	0

BASED ON PRELIMINARY REPORTS AND 1951-80 NORMALS

Weather Data for the Week Ending JUNE 23, 1984

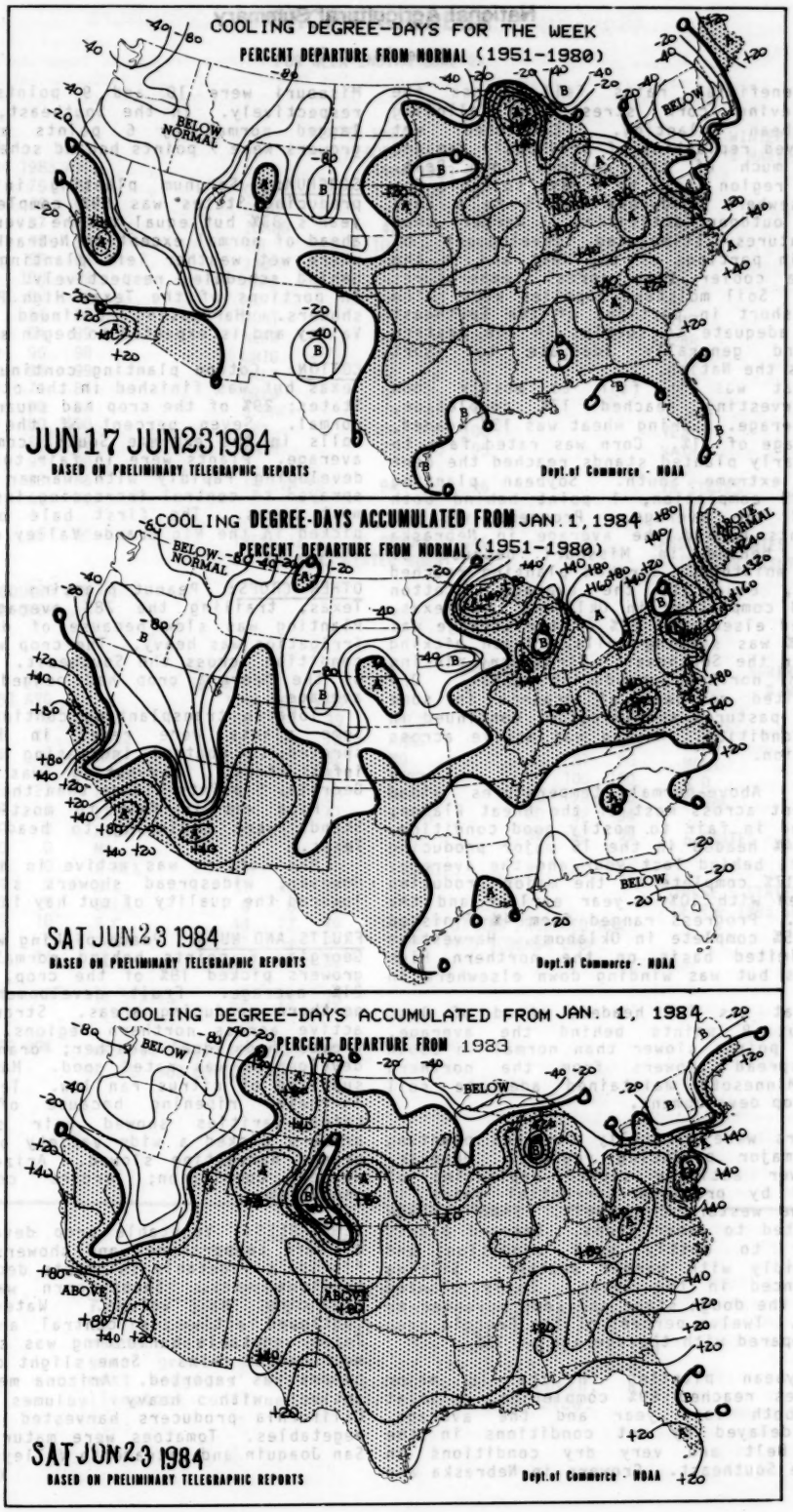
STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																TEMPERATURE °F		PRECIPITATION	
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE June 3	PCT. NORMAL SINCE June 3	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
	DAYTON	84	65	90	61	75	2	1.1	.2	.7	1.6	59	17.0	93	82	60	1	0	3	1
	TOLEDO	83	62	90	52	73	3	.5	- .3	.4	.9	38	15.1	98	89	51	1	0	3	0
	YOUNGSTOWN	83	60	88	52	71	4	1.9	1.1	1.3	3.5	146	18.1	102	93	56	0	0	3	1
OK	OKLAHOMA CITY	94	72	98	69	83	5	.2	- .6	.2	2.1	78	11.7	74	71	37	7	0	1	0
	TULSA	95	75	98	72	85	5	.1	- .9	.1	.4	12	23.8	124	89	43	7	0	2	0
OR	ASTORIA	62	50	66	46	56	-1	.8	.3	.6	2.4	141	33.7	94	90	68	0	0	2	1
	BURNS	69	40	79	35	55	-7	.1	- .1	.1	.9	150	5.6	181	66	31	0	0	2	0
	MEDFORD	82	47	96	44	65	-2	.2	.1	.2	.7	140	6.8	66	85	29	1	0	1	0
	PENDLETON	76	52	90	46	64	-4	.3	.1	.3	1.1	220	8.1	123	75	32	1	0	1	0
	PORTLAND	74	53	87	49	64	0	1.9	1.6	1.3	3.5	318	19.3	99	84	44	0	0	2	2
	SALEM	72	43	84	36	57	-5	1.3	1.0	1.1	3.2	320	22.2	105	99	52	0	0	2	1
PA	ALLENTOWN	80	62	90	56	71	0	1.3	.5	.8	1.8	75	25.6	123	87	47	1	0	2	1
	ERIE	78	60	85	52	69	3	3.2	2.4	2.0	4.0	154	18.6	104	90	56	0	0	3	2
	HARRISBURG	79	63	87	60	71	-1	2.6	1.8	1.5	4.2	168	26.9	143	76	46	0	0	3	2
	PHILADELPHIA	80	63	88	58	72	-2	1.3	.4	1.0	1.7	63	24.1	122	81	47	0	0	3	1
	PITTSBURGH	84	61	88	55	72	3	.8	.1	.6	.9	39	15.9	86	76	42	0	0	3	1
	SCRANTON	77	58	84	52	67	-1	1.3	.5	1.0	1.7	71	19.3	120	86	48	0	0	2	1
RI	PROVIDENCE	76	58	80	53	67	-1	1.1	.4	1.0	1.7	81	31.4	141	86	50	0	0	3	1
SC	CHARLESTON	91	71	99	70	81	2	.9	- .7	.8	.9	20	27.9	120	92	59	3	0	3	1
	COLUMBIA	93	70	101	68	82	3	2.5	1.5	1.5	2.6	84	25.2	102	93	45	4	0	2	2
	FLORENCE	91	70	100	67	80	2	3.4	2.3	2.9	3.9	122	26.2	126	92	47	4	0	4	1
	GREENVILLE	89	71	97	67	80	4	.9	- .2	.8	1.3	39	30.4	112	85	51	4	0	4	1
SD	ABERDEEN	77	61	80	56	69	1	1.2	.5	.4	4.0	223	11.6	126	90	50	0	0	5	0
	HURON	80	61	83	57	71	1	3.8	3.0	1.6	10.5	420	19.3	197	97	63	0	0	4	3
	RAPID CITY	77	54	84	50	65	-2	.2	- .6	.1	4.6	192	10.4	111	90	52	0	0	3	0
	SIOUX FALLS	80	60	85	55	70	0	3.0	2.1	1.9	8.5	304	20.3	178	91	56	0	0	4	2
TN	CHATTANOOGA	93	68	99	66	80	4	.9	.1	.5	1.3	57	25.6	93	92	66	5	0	3	0
	KNOXVILLE	89	66	92	65	78	2	.4	- .5	.2	1.2	44	25.2	101	94	50	4	0	3	0
	MEMPHIS	93	76	95	74	85	5	.1	- .7	.1	1.1	42	27.6	98	83	64	7	0	1	0
	NASHVILLE	89	70	95	67	80	3	3.0	2.2	1.8	4.4	176	31.5	121	91	51	4	0	5	2
TX	ABILENE	97	75	101	73	86	4	0	- .6	0	.3	17	2.9	27	62	24	7	0	0	0
	AMARILLO	85	64	92	62	74	-2	.9	.1	.2	5.9	236	9.0	106	93	47	3	0	4	0
	AUSTIN	95	72	98	71	84	1	.1	- .5	.1	1.7	77	8.1	52	87	35	7	0	1	0
	BEAUMONT	92	72	94	71	82	0	0	- .9	0	.8	30	24.4	110	100	58	5	0	0	0
	BROWNSVILLE	91	74	94	72	83	0	.2	- .5	.2	2.5	125	14.2	151	90	59	7	0	1	0
	CORPUS CHRISTI	92	72	95	71	82	-1	.1	- .7	.1	.2	8	9.1	75	91	49	7	0	2	0
	DEL RIO	95	75	99	73	85	0	0	- .4	0	.4	33	4.7	66	78	32	7	0	0	0
	EL PASO	90	67	98	64	78	-4	1.1	1.0	.6	2.6	867	3.8	190	87	35	4	0	3	1
	FORT WORTH	99	75	103	74	87	3	0	- .6	0	1.6	84	14.8	93	78	30	7	0	0	0
	GALVESTON	87	78	89	77	83	1	0	- .8	0	.1	4	10.6	66	85	66	0	0	0	0
	HOUSTON	92	69	94	67	81	-1	T	- .9	T	1.6	55	15.9	74	87	64	6	0	0	0
	LUBBOCK	86	66	95	62	76	-3	1.2	.6	.8	4.3	215	5.3	69	88	50	3	0	3	1
	MIDLAND	91	70	97	67	80	-1	T	- .3	T	2.1	210	6.0	109	71	34	4	0	0	0
	SAN ANGELO	96	73	101	71	84	2	0	- .4	0	.4	29	4.7	57	78	29	7	0	0	0
	SAN ANTONIO	95	74	96	71	84	1	.2	- .5	.2	1.2	52	9.3	67	89	35	7	0	1	0
	VICTORIA	93	75	95	74	84	1	.2	- .8	.2	2.0	61	12.4	74	86	45	7	0	1	0
	WACO	95	74	99	73	85	1	0	- .5	0	1.3	68	10.7	65	84	40	7	0	0	0
	WICHITA FALLS	99	74	104	69	87	4	.1	- .5	.1	1.0	50	5.6	40	72	25	7	0	1	0
UT	BLANDING	86	50	92	44	68	0	0	- .1	0	.7	350	3.1	67	54	14	1	0	0	0
	CEDAR CITY	88	48	91	42	68	0	0	- .1	0	.4	133	4.9	102	37	11	1	0	0	0
	SALT LAKE CITY	83	57	90	53	70	0	.1	- .2	.1	1.8	257	10.5	118	66	20	1	0	1	0
VT	BURLINGTON	75	51	82	43	63	-3	.3	- .6	.3	1.3	50	16.4	112	84	37	0	0	1	0
VA	NORFOLK	85	68	94	62	77	1	0	- .8	0	.3	13	26.6	132	87	62	1	0	0	0
	RICHMOND	91	66	98	59	79	4	T	- .9	T	.1	4	27.5	142	87	40	3	0	1	0
	ROANOKE	86	65	94	62	76	3	.2	- .6	.2	.7	29	19.9	102	91	47	3	0	1	0
WA	COLVILLE	71	47	78	44	59	-3	1.9	1.6	1.7	5.2	520	15.6	181	88	55	0	0	3	1
	OMILLAYUTE	63	46	71	40	55	-1	T	- .6	T	1.1	52	62.4	118	98	59	0	0	3	0
	SEATTLE-TACOMA	69	51	83	49	60	-1	1.6	1.3	1.0	2.3	230	19.9	106	82	45	0	0	2	2
	SPOKANE	70	47	78	44	59	-4	1.0	.8	.8	2.1	233	9.7	111	90	49	0	0	3	1
	YAKIMA	73	48	81	40	61	-5	.9	.8	.8	1.4	467	5.0	125	78	42	0	0	2	1
WV	BECKLEY	82	62	86	60	72	5	.2	- .8	.1	.6	22	16.5	76	96	57	0	0	2	0
	CHARLESTON	90	67	93	62	78	6	.2	- .7	.2	.2	9	15.0	73	90	43	5	0	1	0
	HUNTINGTON	89	68	92	65	78	6	.3	- .6	.1	.9	36	16.2	79	92	48	4	0	4	0
	PARKERSBURG	89	69	94	62	79	7	T	- 1.0	T	0	0	13.6	60	85	42	3	0	0	0
WI	GREEN BAY	78	61	86	57	69	3	1.1	.3	1.0	5.3	241	14.3	114	90	58	0	0	3	1
	LA CROSSE	81	63	85	54	72	2	1.4	.4	1.2	7.3	252	16.5	120	93	52	0	0	3	1
	MADISON	80	60	84	55	70	2	1.9	1.0	1.4	6.5	241	16.3	118	91	50	0	0	3	1
	MILWAUKEE	76	60	91	55	68	2	2.3	1.4	1.1	3.8	152	16.8	116	88	61	1	0	4	3
	WAUSAU	76	59	82	56	68	2	1.0	.1	.6	5.7	197	14.8	100	86	57	0	0	3	1
WY	CASPER	82	45	87	40	64	-1	.1	- .2	.1	1.0	111	8.0	116	85	18	0	0	1	0
	CHEYENNE	74	48	81	45	61	-3	.1	- .4	.1	2.2	147	9.8	120	88	38	0	0	2	0
	LANDER	81	53	85	47	67	3	T	- .3	T	1.1	110	7.9	95	57	20	0	0	1	0
	SHERIDAN	79	51	90	44	65	2	.1	- .4	.1	1.9	112	8.6	96	84	35	1	0	1	0
PR	SAN JUAN	90	74	92	73	82	0	.6	- .5	.3	6.3	191	15.8	76	87	58	6	0	3	0

BASED ON PRELIMINARY REPORTS AND 1951-80 NORMALS

HEATING DEGREE DAY DATA #WEEKLY SUMMARY
CLIMATE ANALYSIS CENTER-NMC-NWS-NOAA
ASSESSMENT AND INFORMATION SERVICES CENTER-NESDIS-NOAA

LAST DATE OF DATA COLLECTION PERIOD IS 6-23-1984
ACCUMULATIONS ARE FROM JULY 1
** = NORMAL LESS THAN 100 OR RATIO INCALCULABLE

STATE CITY	CALL	WEEK TOTAL	WEEK DEV FROM NORM	WEEK DEV FROM L YR	CUM TOTAL	CUM DEV FROM NORM	CUM DEV FROM L YR	CUM DEV FROM NORM PRCT	CUM DEV FROM L YR PRCT
AL BIRMINGHAM	BHM	113	21	37	483	-56	134	-10	38
AL MOBILE	MOB	118	5	34	675	-196	157	-23	30
AL MONTGOMERY	MGM	122	17	40	638	-58	198	-8	45
AK ANCHORAGE	ANC	0	0	0	0	0	0	**	**
AK BARROW	BRW	0	0	0	0	0	0	**	**
AK FAIRBANKS	FAI	11	8	-6	11	-1	-78	**	**
AK JUNEAU	JNU	0	0	0	0	0	0	**	**
AK KODIAK	ADQ	0	0	0	0	0	0	**	**
AK NOME	OME	0	0	0	0	0	0	**	**
AZ FLAGSTAFF	FLG	0	-7	0	2	-11	2	**	**
AZ PHOENIX	PHX	182	20	-6	1536	449	348	41	29
AZ TUCSON	TUS	139	3	4	973	179	261	23	37
AZ WINSLOW	INW	60	-3	-21	252	52	77	26	37
AZ YUMA	YUM	172	5	-16	1496	239	199	19	15
AR FORT SMITH	FSM	124	28	38	463	-44	159	-9	52
AR LITTLE ROCK	LRK	130	-27	37	530	-36	159	-6	43
CA BAKERSFIELD	BFL	85	-17	2	413	-179	-77	-30	-16
CA EUREKA	EKA	0	0	0	0	0	0	**	**
CA FRESNO	FAT	104	24	16	596	191	118	47	25
CA LOS ANGELES	LAX	15	-6	-2	124	14	85	13	110
CA RED BLUFF	RBL	100	12	36	468	34	47	8	11
CA SAN DIEGO	SAN	35	14	7	277	158	135	133	95
CA SAN FRANCISCO	SFO	2	-1	2	43	37	19	**	**
CA STOCKTON	SCK	72	7	16	370	65	54	21	17
CO DENVER	DEN	28	-11	-12	181	-25	29	-28	56
CO GRAND JUNCTION	GJT	60	-4	-25	256	25	92	11	56
CO PUEBLO	PUB	62	4	-7	210	17	110	9	110
CT BRIDGEPORT	BDR	36	5	-1	170	83	78	**	**
CT HARTFORD	BDL	22	-13	-42	153	40	-11	35	-7
DE WILMINGTON	ILG	52	-1	-4	262	80	42	44	19
DC WASHINGTON	DCA	81	6	-3	389	70	64	22	20
FL APALACHICOLA	AQQ	101	-8	1	599	-225	24	-27	4
FL DAYTONA BEACH	DAB	101	-4	16	687	-286	75	-29	12
FL FORT MEYER	FMY	124	8	12	1285	-89	279	-6	28
FL JACKSONVILLE	JAX	112	8	28	713	-83	170	-10	31
FL KEY WEST	EYW	116	-10	-4	1783	-137	314	-7	21
FL MIAMI	MIA	111	-2	-8	1414	-195	66	-12	5
FL ORLANDO	MCO	113	0	1	933	-308	1	-25	0
FL TALLAHASSEE	TLH	112	7	14	704	-103	94	-13	15
FL TAMPA	TPA	119	5	-1	1132	-78	140	-6	14
FL WEST PALM BEACH	PBI	108	-4	-9	1240	-164	3	-12	0
GA ATLANTA	ATL	118	35	50	470	2	164	0	54
GA AUGUSTA	AGS	116	22	31	549	-4	125	-1	29
GA MACON	MCN	125	21	19	657	-34	41	-5	7
GA SAVANNAH	SAV	121	21	28	700	-20	100	-3	17
HI HILO-HAWAII	ITO	68	-2	-4	1481	182	144	14	11
HI HONOLULU-OAHU	HNL	98	0	-4	2072	280	431	16	26
HI KAHELUI-MAUI	OGG	111	24	16	2013	476	471	31	31
HI LIHUE-KAUAI	LIH	106	16	12	1970	494	424	33	27
ID BOISE	BOI	6	-25	-21	30	-57	-73	**	**
ID LEWISTON	LWS	3	-27	-6	27	-58	-98	**	**
ID POCATELLO	PIH	3	-13	-9	18	-21	-1	**	**
IL CHICAGO	ORD	59	23	7	180	31	62	21	53
IL MOLINE	MLI	88	36	6	256	46	79	22	45
IL PEORIA	PIA	94	40	19	278	52	117	23	73
IL ROCKFORD	RFD	69	27	0	182	26	53	17	41
IL SPRINGFIELD	SPI	92	25	9	322	19	122	6	61
IN EVANSVILLE	EVV	113	36	25	418	49	186	13	80
IN FORT WAYNE	FWA	85	42	11	259	82	93	46	56
IN INDIANAPOLIS	IND	107	51	32	294	55	149	23	103
IN SOUTH BEND	SBN	70	32	-9	226	68	63	43	39
IA DES MOINES	DSM	82	25	-5	229	5	29	2	14
IA DUBUQUE	DBQ	57	23	-1	136	14	31	11	30
IA SIOUX CITY	SUX	59	5	-1	151	-50	49	-25	48
KS CONCORDIA	CNK	78	6	-2	282	-3	150	-1	114
KS DODGE CITY	DDC	99	19	-4	343	12	129	4	60
KS GOODLAND	GLD	38	-15	-27	88	-79	-18	-47	-17
KS TOPEKA	TOP	78	5	-16	305	-25	62	-8	26
KS WICHITA	ICT	114	24	20	369	-34	187	-8	103
KY LEXINGTON	LEX	101	42	30	384	49	167	17	94
KY LOUISVILLE	SDF	105	34	32	393	52	186	15	90
LA BATON ROUGE	BTR	125	13	42	801	-73	229	-8	40
LA LAKE CHARLES	LCH	121	9	34	904	22	270	2	43
LA NEW ORLEANS	MSY	116	4	26	738	-185	90	-20	14
LA SHREVEPORT	SHV	122	11	29	684	-68	202	-9	42
ME CARIBOU	CAR	4	1	-43	45	41	-18	**	**
ME PORTLAND	PWM	7	0	-34	71	60	14	**	**
MD BALTIMORE	BWI	54	-6	-7	273	45	40	20	17
MA BOSTON	BOS	30	-2	-48	206	111	38	**	**
MI ALPENA	APN	7	0	-12	55	42	11	**	**
MI DETROIT	DTW	58	28	11	184	66	84	56	84
MI FLINT	FNT	49	24	10	141	53	43	**	**
MI GRAND RAPIDS	GRR	55	24	13	165	49	66	42	67
MI HOUGHTON LAKE	MTL	18	2	-3	70	10	19	**	**
MI LANSING	LAN	52	22	13	162	50	72	45	80
MI MARQUETTE	MQT	11	7	-10	41	17	-11	**	**
MI MUSKEGON	MKG	31	5	-9	78	-7	-2	**	**
MI SAULT ST MARIE	SSM	1	-2	-18	24	3	-17	**	**
MN DULUTH	DLH	3	-2	-10	13	8	-13	**	**
MN INT'L FALLS	INL	7	-5	-16	18	-24	-24	**	**
MN MINNEAPOLIS	MSP	44	5	-8	129	-4	36	-3	39
MN ROCHESTER	RST	25	-4	-22	57	-45	-21	-44	-27
MN SAINT CLOUD	STC	26	2	0	69	-5	10	**	**
MS JACKSON	JAN	119	13	40	676	-43	192	-6	40
MS MERIDIAN	MEI	97	-4	27	452	-211	66	-32	17
MO COLUMBIA	COU	88	22	15	290	-3	125	-1	76
MO KANSAS CITY	MCI	84	12	9	285	-31	124	-10	77
MO SAINT LOUIS	STL	126	46	35	454	80	207	21	84
MO SPRINGFIELD	SGF	97	29	13	343	8	142	2	71
MT BILLINGS	BIL	9	-17	0	50	-3	-2	**	**
MT GLASGOW	GGW	11	-8	1	55	6	28	**	**
MT GREAT FALLS	GTF	0	-14	-5	20	-9	2	**	**
MT HAVRE	HVR	2	-18	-6	26	-23	4	**	**
MT HELENA	HLN	0	-11	-7	12	-7	-5	**	**
MT KALISPELL	FCA	0	-3	-4	0	-8	-8	**	**
MT MILES CITY	MLS	27	-10	5	83	-22	25	-21	43
MT MISSOULA	MSO	0	-4	-2	0	-11	-5	**	**
NE GRAND ISLAND	GRI	77	19	0	234	24	97	11	71
NE LINCOLN	LNK	72	10	-16	221	-15	50	-6	29
NE NORFOLK	OFK	66	12	-5	182	-9	44	-5	32
NE NORTH PLATTE	LBF	41	-3	-11	115	-23	43	-17	60
NE OMAHA	OMA	69	2	-4	195	-82	59	-30	43
NE VALENTINE	VTN	44	3	-4	124	6	61	5	97
NV ELY	ELY	0	-4	-4	1	-8	-3	**	**
NV LAS VEGAS	LAS	143	1	-10	947	147	266	18	39
NV RENO	RNO	6	-8	4	23	-15	1	**	**
NV WINNEMUCCA	WMC	7	-17	0	15	-54	-19	**	**
NH CONCORD	CON	12	-4	-34	105	61	19	**	**
NJ ATLANTIC CITY	ACY	45	4	-5	250	118	61	89	32
NM ALBUQUERQUE	ABQ	76	-2	-24	352	85	78	32	28
NM ROSWELL	ROW	62	-85	-63	521	-25	150	-5	40
NY ALBANY	ALB	5	-19	-49	90	9	-32	**	**
NY BINGHAMTON	BGM	9	-10	-38	105	60	-2	**	**
NY BUFFALO	BUF	22	-1	-40	126	46	-3	**	**
NY NEW YORK	LGA	41	-12	-24	260	79	75	44	41
NY ROCHESTER	ROC	18	-6	-33	122	34	7	**	**
NY SYRACUSE	SYR	11	-12	-40	83	-1	-23	**	**
NC ASHEVILLE	AVL	47	4	2	165	-21	70	-11	74
NC CAPE HATTERAS	HAT	101	29	33	402	78	122	24	44
NC CHARLOTTE	CLT	92	14	18	412	-4	123	-1	43
NC GREENSBORO	GSO	81	14	22	339	-7	141	-2	71
NC RALEIGH DURHAM	RDU	84	14	16	384	28	116	8	43
NC WILMINGTON	ILM	113	25	20	520	-8	190	-2	58
ND BISMARCK	BIS	14	-8	0	45	-21	12	**	**
ND FARGO	FAR	28	3	-10	66	-18	-3	**	**
ND WILLISTON	ISN	12	-9	1	42	-18	0	**	**
OH AKRON-CANTON	CAK	54	21	26	165	39	62	31	60
OH CLEVELAND	CLE	54	25	5	161	47	28	41	21
OH COLUMBUS	CMH	80	34	38	256	63	138	33	117
OH CINCINNATI	CVG	89	35	18	297	60	141	25	90
OH DAYTON	DAY	71	19	23	238	22	122	10	105
OH TOLEDO	TOL	57	22	23	202	72	110	55	120
OH YOUNGSTOWN	YNG	47	21	15	153	55	67	**	**
OK OKLAHOMA CITY	OKC	127	33	36	498	28	203	6	69
OK TULSA	TUL	142	42	23	529	17	106	3	25
OR ASTORIA	AST	0	0	0	0	0	0	**	**
OR BURNS	ABW	0	-12	0	3	-27	-13	**	**
OR MEDFORD	MFR	9	-18	9	37	-40	-75	**	**
OR PENDLETON	PDT	11	-21	10	26	-65	-59	**	**
OR PORTLAND	PDX	7	-7	7	20	-14	-45	**	**
OR SALEM	SLE	0	-8	0	1	-17	-22	**	**
PA ALLENTOWN	ABE	41	2	-7	200	71	38	55	23
PA ERIE	ERI	31	11	-8	147	91	49	**	**
PA HARRISBURG	CXY	44	-9	9	213	12	77	6	57
PA PHILADELPHIA	PHL	49	-8	-4	220	16	-7	8	-3
PA PITTSBURGH	PIT	52	21	22	160	37	71	30	80
PA SCRANTON	AVP	19	-10	-20	152	57	40	**	**
RI PROVIDENCE	PVD	20	-4	-41	144	80	8	**	**
SC CHARLESTON	CHS	113	19	26	632	21	133	3	27
SC COLUMBIA	CAE	119	23	29	577	-38	160	-6	38
SC GREENVILLE	GSP	105	29	39	479	69	228	17	93
SD ABERDEEN	ABR	30	-2	-5	59	-41	2	-41	4
SD HURON	HON	40	-2	-12	83	-35	7	-30	9
SD RAPID CITY	RAP	10	-23	-19	39	-41	-8	**	**
SD SIOUX FALLS	FSD	37	-6	-8	95	-43	10	-31	12
TN CHATTANOOGA	CHA	110	30	39	391	-24	149	-6	62
TN KNOXVILLE	TYS	91	18	24	334	-54	110	-14	49
TN MEMPHIS	MEM	138	34	34	607	10	177	2	41
TN NASHVILLE	BNA	104	19	18	419	-22	116	-5	38
TX ABILENE	ABI	148	31	51	844	109	286	15	51
TX AMARILLO	AMA	68	-12	-20	336	-16	171	-5	104
TX AUSTIN	AUS	132	8	30	1097	158	460	17	72
TX BROWNSVILLE	BRO	127	1	-1	1479	18	175	1	13
TX CORPUS CHRISTI	CRP	122	-6	8	1165	-120	225	-9	24
TX DEL RIO	DRT	141	4	16	1184	12	187	1	19
TX EL PASO	ELP	96	-23	-22	702	56	221	9	46
TX FORT WORTH	DFW	156	27	47	764	-95	261	-11	52
TX GALVESTON	GLS	127	8	16	826	-102	103	-11	14
TX HOUSTON	IAH	111	-5	21	821	-75	161	-8	24
TX LUBBOCK	LBB	81	-16	-19	495	8	166	2	50
TX MIDLAND ODESSA	MAF	108	-4	-14	691	23	81	3	13
TX SAN ANGELO	SJT	135	12	46	870	41	255	5	41
TX SAN ANTONIO	SAT	138	12	40	1057	56	351	6	50
TX VICTORIA	VCT	134	9	26	1074	-13	241	-1	29
TX WACO	ACT	139	11	27	886	0	289	0	48
TX WICHITA FALLS	SPS	151	30	53	722	29	299	4	71
UT SALT LAKE CITY	SLC	39	-3	0	118	-12	23	-9	24
VT BURLINGTON	BTV	9	-8	-46	90	28	-22	**	**
VA LYNCHBURG	LYH	75	21	15	330	93	138	39	72
VA NORFOLK	ORF	87	13	23	415	91	120	28	41
VA RICHMOND	RIC	96	28	4	438	134	84	44	24
VA ROANOKE	ROA	76	22	29	328	76	172	30	110
WA QUILLAYUTE	UIL	0	0	0	0	0	-4	**	**
WA SEATTLE-TACOMA	SEA	3	-1	3	4	-9	-22	**	**
WA SPOKANE	GEG	0	-13	-3	6	-28	-65	**	**
WA WALLA WALLA	ALW	20	-17	14	69	-49	-82	-42	-54
WA YAKIMA	YKM	4	-17	3	16	-56	-78	**	**
WV BECKLEY	BKW	52	29	32	183	85	120	**	**
WV CHARLESTON	CRW	94	44	34	354	109	172	44	95
WV HUNTINGTON	HTS	96	41	35	362	77	186	27	106
WV PARKERSBURG	PKB	97	46	38	313	74	137	31	78
WI GREEN BAY	GRB	31	10	0	85	8	28	**	**
WI LACROSSE	LSE	48	8	-21	131	-16	11	-11	9
WI MADISON	MSN	36	10	-8	94	-1	7	**	**
WI MILWAUKEE	MKE	32	11	0	138	66	63	**	**
WY CASPER	CPR	6	-15	-7	32	-11	17	**	**
WY CHEYENNE	CYS	0	-15	-7	2	-28	-5	**	**
WY LANDER	LND	19	0	6	45	8	27	**	**
WY SHERIDAN	SHR	13	-4	4	25	-7	5	**	**


COOLING DEGREE-DAYS FOR THE WEEK
PERCENT DEPARTURE FROM NORMAL (1951-1980)
BELOW NORMAL
ABOVE NORMAL
JUN 17 JUN 23 1984
BASED ON PRELIMINARY TELEGRAPHIC REPORTS
Dept. of Commerce - NOAA
COOLING DEGREE-DAYS ACCUMULATED FROM JAN. 1, 1984
PERCENT DEPARTURE FROM NORMAL (1951-1980)
BELOW NORMAL
ABOVE NORMAL
SAT JUN 23 1984
BASED ON PRELIMINARY TELEGRAPHIC REPORTS
Dept. of Commerce - NOAA
COOLING DEGREE-DAYS ACCUMULATED FROM JAN. 1, 1984
PERCENT DEPARTURE FROM 1983
BELOW
ABOVE
SAT JUN 23 1984
BASED ON PRELIMINARY TELEGRAPHIC REPORTS
Dept. of Commerce - NOAA

National Agricultural Summary

June 18 to 24

HIGHLIGHTS: Beneficial rains fell across the Southeast relieving corn stress and allowing increased soybean planting. Continued wet conditions delayed replanting of previously damaged fields across much of the western Corn Belt. Farmers in this region had 2 to 4 days suitable for fieldwork. Elsewhere producers had 5 to 6 days available for outdoor activities. Warmer than normal temperatures stimulated development of crops, except in portions of the West and in the Northeast where cooler than normal temperatures limited growth. Soil moisture supplies were rated short to very short in portions of the Southeast and Southwest, adequate to surplus in the western Corn Belt, and generally adequate to short elsewhere across the Nation.

Winter wheat was in fair to mostly good condition. Harvesting reached 17% completion, equal to the average. Spring wheat was 13% headed, behind the average of 21%. Corn was rated fair to mostly good. Early planted stands reached the dent stage in the extreme South. Soybean planting advanced to 89% completion, 1 point behind both last year and the average. Progress was 10 percentage points behind the average in Nebraska and 9 points behind in Missouri because of excessive soil moisture. Sorghum planting reached 89% completion, equal to the average. Cotton planting neared completion in Oklahoma and Texas, and was finished elsewhere; 29% of the acreage was squaring and 7% was setting bolls. Peach picking lagged normal in the Southeast. Strawberry picking was active in northern producing areas. Dry conditions limited regrowth of grasses in some areas. However pastures and livestock continued in fair to good condition. Haying was active across much of the Nation.

SMALL GRAINS: Above-normal temperatures aided wheat development across most of the Great Plains. Stands continued in fair to mostly good condition. The crop was 94% headed in the 15 major producing States, 2 points behind last year and the average. Combining was 17% complete in the major producing States, compared with 10% a year earlier and the average of 17%. Progress ranged from 4% finished in Kansas to 65% complete in Oklahoma. Harvesting began on a limited basis on the northern High Plains of Texas but was winding down elsewhere in the State.

Spring wheat was 13% headed, ahead of last year's 12% but 8 points behind the average. Heading was 30 points slower than normal in South Dakota. Widespread showers from the northern Plains into Minnesota maintained adequate soil moisture for crop development.

CORN: Producers were virtually finished planting corn in the major producing regions. However, continued shower activity slowed replanting of fields damaged by previous torrential rains in portions of the western Corn Belt. Some acreage will be replanted to other crops. Emerged plants were in fair to mostly good condition and developing rapidly with warmer weather. Silking was well advanced in the South. Early planted stands were in the dough stage and some advanced to the dent stage. Twelve percent of the Georgia crop was dented, compared with the average of 15%.

SOYBEANS: Soybean planting in the 18 major producing States reached 89% completion, 1 point slower than both last year and the average. Planting was delayed by wet conditions in the western Corn Belt and very dry conditions in portions of the Southeast. Growers in Nebraska and Missouri were 10 and 9 points behind schedule, respectively. In the Southeast, Georgia producers lagged normal by 6 points and South Carolina growers were 7 points behind schedule.

SORGHUM: Sorghum planting in the seven major producing States was 89% complete, ahead of last year's 85% but equal to the average. Progress was ahead of normal except in Nebraska and South Dakota where wet weather left planting 10 and 34 points behind schedule, respectively. Planting increased in portions of the Texas High Plains after recent showers. Harvesting continued in the Rio Grande Valley and is expected to begin soon in South Texas.

COTTON: Cotton planting continued in Oklahoma and Texas but was finished in the other major producing States; 29% of the crop had squared, 1 point behind normal. Seven percent of the crop was setting bolls in the extreme South, compared with the 8% average. Plants were in fair to good condition and developing rapidly with warmer weather. Growers sprayed to control increasing insect populations in most areas. The first bale of new cotton was picked in the Rio Grande Valley of Texas during the week.

OTHER CROPS: Peanut planting was 75% complete in Texas, trailing the 78% average for this date. Planting was slow because of dry conditions, and irrigation was heavy. The crop was in fair to good condition across the Southeast. Twenty-six percent of the Georgia crop had pegged, lagging the 41% average.

Tobacco transplanting continued in many areas. Some plants were reset in Kentucky. Growers sprayed to control increasing disease and insect infestations. Harvesting was 7% complete in Georgia, 5 points slower than the normal pace.

Rice was in fair to mostly good condition. Stands were beginning to head in Louisiana and Texas.

Hay cutting was active in nearly all regions. However, widespread showers slowed progress and lowered the quality of cut hay in many areas.

FRUITS AND NUTS: Peach picking was 46% complete in Georgia, 6 points behind normal. South Carolina growers picked 18% of the crop, compared with the 21% average. Fruit development was normal in northern producing areas. Strawberry picking was active across northern regions. Florida's citrus groves had ideal weather; orange and grapefruit development was rated good. Harvesting slowed as supplies of citrus ran low. Texas peaches showed increased ripening because of warmer weather. Later varities showed fair sizes. California growers picked a wide variety of fruit. Valencia orange harvesting slowed. Arizona citrus packing neared completion; groves continued in good condition.

VEGETABLES: Vegetable crop development was aided by warm temperatures and showers in most regions. Florida's vegetable shipments declined 11% from the previous week. Sweet corn was the only crop advancing in volume. Watermelon harvesting continued active in central and northern areas. Texas vegetable harvesting was slightly delayed by much needed rains. Some slight damage to cantaloup blooms was reported. Arizona melon harvesting was active with heavy volumes being shipped. California producers harvested a wide variety of vegetables. Tomatoes were maturing rapidly in the San Joaquin and Sacramento Valleys.

(continued on p. 13)

CROP PROGRESS

FOR WEEK ENDING JUNE 24

SOYBEANS
% PLANTED

	1984	1983	AVG.
ALA	82	79	85
ARK	83	79	81
GA	82	87	88
ILL	96	98	96
IND	99	97	94
IOWA	94	100	99
KANS	85	80	70
KY	72	64	68
LA	95	84	89
MICH	98	96	98
MINN	97	98	99
MISS	80	74	84
MO	74	90	83
NEBR	90	100	100
N C	82	82	82
OHIO	98	99	90
S C	79	83	86
TENN	77	69	79
18 STATES	89	90	90

THESE 18 STATES PRODUCED 93%
OF THE 1983 SOYBEAN CROP.

WINTER WHEAT
% HEADED

	1984	1983	AVG.
CALIF	100	100	100
COLO	94	92	94
IDAHO	42	62	66
ILL	100	100	100
IND	100	100	100
KANS	100	100	100
MO	100	100	100
MONT	55	65	55
NEBR	100	100	100
OHIO	98	99	100
OKLA	100	100	100
OREG	95	99	96
S DAK	78	85	95
TEX	100	100	100
WASH	73	100	95
15 STATES	94	96	96

THESE 15 STATES PRODUCED 84%
OF THE 1983 WINTER WHEAT CROP.

WINTER WHEAT
% HARVESTED

	1984	1983	AVG.
CALIF	54	50	56
COLO	0	0	0
IDAHO	0	0	0
ILL	0	1	8
IND	0	0	0
KANS	4	0	10
MO	15	11	18
MONT	0	0	0
NEBR	0	0	0
OHIO	0	0	0
OKLA	65	25	50
OREG	0	0	0
S DAK	0	0	0
TEX	61	45	52
WASH	0	0	0
15 STATES	17	10	17

THESE 15 STATES PRODUCED 84%
OF THE 1983 WINTER WHEAT CROP.

COTTON
% SETTING BOLLS

	1984	1983	AVG.
ALA	0	0	0
ARIZ	40	20	25
ARK	0	0	0
CALIF	1	0	3
GA	15	5	23
LA	1	0	3
MISS	0	0	3
MO	0	0	0
N MEX	0	0	0
N C	4	4	5
OKLA	0	0	0
S C	6	9	10
TENN	0	0	0
TEX	9	5	11
14 STATES	7	4	8

THESE 14 STATES PRODUCED 99%
OF THE 1983 COTTON CROP.

COTTON
% SQUARING

	1984	1983	AVG.
ALA	50	14	39
ARIZ	85	80	78
ARK	36	15	32
CALIF	31	30	37
GA	58	65	80
LA	23	20	41
MISS	45	31	53
MO	49	0	28
N MEX	17	1	28
N C	31	30	32
OKLA	0	0	0
S C	43	77	79
TENN	12	7	26
TEX	21	11	20
14 STATES	29	19	30

THESE 14 STATES PRODUCED 99%
OF THE 1983 COTTON CROP.

SORGHUM
% PLANTED

	1984	1983	AVG.
COLO	87	78	85
KANS	85	75	80
MO	89	87	80
NEBR	90	100	100
OKLA	90	70	85
S DAK	60	92	94
TEX	96	92	95
7 STATES	89	85	89

THESE 7 STATES PRODUCED 85%
OF THE 1983 SORGHUM CROP.

SPRING WHEAT
% HEADED

	1984	1983	AVG.
IDAHO	20	12	29
MINN	22	13	27
MONT	10	10	10
N D	7	6	13
S DAK	19	31	49
5 STATES	13	12	21

THESE 5 STATES PRODUCED 94%
OF THE 1983 SPRING WHEAT CROP.

(continued from p. 12)

PASTURES AND RANGES: Pastures and ranges were in fair to good condition. Showers benefited ranges in portions of the Southwest, but more rain is needed to sustain growth. Dry conditions limited grass growth in some areas of the South. However, most regions had adequate grass growth, and livestock continued in fair to good condition.

State Summaries of Weather and Agriculture

These summaries provide brief descriptions of crop and weather conditions important on a national scale. More detailed data are available in Weather and Crop Bulletins published each Monday by SRS State Statistical Offices in cooperation with the National Weather Service.

ALABAMA: Rainfall scattered over most areas. Some areas received no rainfall, other areas had up to 2.00 in. Temperatures averaged 3° above normal.

Soil moisture very short to short. Fieldwork: 6.3 days. Corn silked 62%, 25% 1983, 53% average. Soybeans planted 82%, 79% 1983, 85% average. Sorghum planted 84%, 77% 1983, 80% average. Wheat harvested 84%, 42% 1983. Cotton squaring 50%, 14% 1983, 39% average. Peanuts pegging 12%, 15% 1983. Activities: Planting soybeans and sorghum; harvesting wheat, hay, fruits and vegetables; cultivating field crops; disease and insect control of field crops; and routine care of livestock and poultry. Conditions: Corn and pasture mostly fair; soybeans, cotton, sorghum and livestock fair; peanuts fair to good; wheat good.

ALASKA: Weather generally fair with clouds moving into southern part of State late in week.

Sunshine, warm temperatures promoted mostly rapid crop development throughout Railbelt allowing 7.0 days fieldwork. Heights of small grains averaged 7 to 10 in. compared with 6 to 15 in. last year. Oats, barley and mixed grains in pre-boot stage or beyond. Hay harvest in full swing all areas except Kenai Peninsula. First cutting hay harvest 20% complete. Height of potatoes, 1 to 9 in., comparable last year. Soil moisture supplies generally adequate.

ARIZONA: Typically late June weather prevailed, mostly sunny warm days, clear, moderately cool nights. Some cloudiness 19th with isolated showers, thunderstorms, chiefly over White Mountains, amounts 0.06 in. locally. Surge of sub-tropical moisture moved into southeastern area night of 23rd with scattered showers, thunderstorms. Safford soaked with 0.75 in. rain early 24th. Average temperatures varied from 4° below normal to 3° above.

Wheat, barley harvest active, 98% combined. Harvest progress ranged 68% complete southeast, 98% Central Valley, 95% west. Wheat harvest underway Graham, Cochise Counties, barley harvest at peak. Barley harvest practically complete all other areas, wheat combining winding down. Wheat, barley harvest progress one to two weeks ahead of last year. Cotton progress good, 85% squaring, 80% last year, 78% average. Bolls setting in 40% of acreage, 20% last year, 25% average, 85% squaring Central Valley, 55% southeast, 92% west. Corn, sorghum good Yuma County with sorghum heading out, corn tasseling. Corn, sorghum below average Cochise County. Alfalfa good condition, harvest active. Cantaloup, watermelon harvests active, volumes heavy. Honeydew harvest started Salt River Valley, heavy Parker area. Melons good progress. Sizing, quality good. Carrots, green onions harvest active, dry onions, cabbage, greens winding down Salt River Valley. Chipper potatoes harvested in volume. Seedless grape harvest active, exotic varieties winding down. Citrus packing coming to close, groves generally good condition.

ARKANSAS: Hot and humid with temperatures up to 7° above normal. Scattered thundershowers, mostly northwest. Most rain 3.42 in., least 0. High 102°, low 54°.

Soil moisture short. Days favorable for fieldwork 6.3.

Crop progress moderate to slow. Crops need rain. Rice condition good to fair; most fields flooded. Cotton good to fair; squaring 36%, 15% 1983, 32% average. Soybeans good to fair; planted 83%, 79% 1983, 81% average; emerged 74%, 67% 1983, 69% average. Wheat good yields reported; harvested 87%, 78% 1983, 90% normal. Corn good. Sorghum good; virtually planted, same as 1983 and average. Pastures below average. Cattle good condition.

CALIFORNIA: There were a few light showers about midweek, otherwise no precipitation statewide. An upper level disturbance moved across the State with cooler air and dragged cooler ocean air into mid-California. The mid-section of the central valley showed 24-hour changes in high temperatures of 10 to 20°. While weekly mean temperatures throughout the State were narrowly mixed, only the south coast was a few degrees warmer than normal.

Cotton insect control active; irrigation increased due to drying winds. Acreage 31% squared, 30% last year, 37% average; 1% setting bolls, 0% last year, 3% average. Wheat and barley harvests active. Wheat 54% harvested, 50% last year, 56% average. Good irrigated wheat yields reported. Herbicide application active in rice fields. Crop in good condition. Corn, sugarbeets progressing well. Alfalfa cutting continues active. Apricot, fig, Coachella Valley table grape, nectariens, Freestone peach, plum, summer grapefruit harvests active. Valencia orange harvest slowing. Normal June citrus fruit drop active. Some split pits early Clingstone peach varieties. Cool, overcast weather along coast. Harvest artichokes continued light supply, variable quality central coast. Broccoli moderate supply, good quality Salinas-Watsonville and Santa Maria areas. San Joaquin cantaloup harvest begin next week. Honeydew crenshaw melon harvests delayed desert. Carrot harvest continued Riverside, active southern San Joaquin. Cauliflower moderate supply Salinas-Watsonville area good quality. Santa Maria supply fairly light. Harvest celery continued south coast, light supplies central coast. Sweet corn harvest continues slow desert increasing San Joaquin areas. Harvest cucumbers active. Garlic drying San Joaquin Valley preparation for harvest. Lettuce moderate supply Salinas-Watsonville, Santa Maria areas variable quality. Onion harvest active San Joaquin. Spring potato harvest very active Kern district. Fall potato crop doing well, Tulelake-Butte Valley. Summer potato harvest approaching. Sweetpotatoes fertilized, irrigated San Joaquin Valley. Harvest market tomatoes increasing south coast, southern San Joaquin Valley. Harvest processing tomatoes continues desert fields maturing rapidly San Joaquin, Sacramento Valleys. Harvest begin 2 weeks Palo Verde Valley. Summer range conditions continue good. Stock water supplies ample. Lower elevations dry, fire danger high. Grasshopper control measures being applied in some districts. Milk production increasing.

COLORADO: Precipitation was heavy with thunderstorms and small hail mainly in the east 18th through 21st. Otherwise, typical weather covered most of the State, with some high winds

reported. Temperatures were within 2° of normal for most of the State.

Warmer temperatures have improved crop conditions over most of the State except for the southeast which is low on moisture. Corn improved with 95% emergence and 14 inch height; 1983, 95% emeged, 11 inch heigh; average, 97% emerged, 9 inch height. Potato plant emergence virtually completed, ahead of normal. Barley behind the normal 45% headed at 41%; turning color normal 7%, 1984, 2%. Dry bean planting 90% complete; 1983, 89% average 90%. Plant emergence at 85%, 1983, 62%, average, 71%. Sugarbeets 81% thinned, normally 81%, and 1983, 59%. Sorghum 87% planted, and 67% emerged; normally 85% and 62%, respectively. Winter wheat 94% headed; 1983, 92%, and average of 94%.

FLORIDA: Routine warm, humid summer weather, scattered mainly afternoon, evening showers, thunderstorms. Most areas received rains of 1.00 to 3.00 in. but a few localized dry areas persisted. Temperatures averaged near normal.

Soil moisture variable mostly adequate central, south; short north, Panhandle. Corn condition variable due to scattered rainfall. Cutting corn silage increased. Tobacco harvest underway; quality fair to good. Soybean planting continued where soil moisture sufficient. Early cotton squaring, late cotton just coming up. Peanut condition good but some weed problems. Sugarcane good growth, some grass hay cut. Grazing conditions north, Panhandle improved slightly due to additional rainfall. Pastures remained good to excellent south, mostly fair to good elsewhere. Cattle condition continued good to excellent south, fair to good elsewhere. Citrus growing conditions continued very good, normal summertime weather. Good fruit and tree growth in southern areas. Orange and grapefruit sizes good. Harvest slowing, supplies running low. Hot days, warm nights continued in vegetable areas. Locally heavy rains occured some areas. Season complete or nearing completion for most crops. Overall vegetable shipments declined 11% from previous week. Sweet corn harvest gained, however. Volume about steady watermelons, okra. No movement cauliflower, escarole, lettuce, strawberries. Shipments declined all other crops. Watermelon harvest continues very active central, northern areas. Light harvest west area. Sweet corn harvest should continue into July. Quality, yields good.

GEORGIA: Hot temperatures through midweek maximums upper 90's common. Scattered afternoon and evening thunderstorms north and east 20th and statewide 21st through 23rd and 24th. Weekly rainfall totals ranged from 3.60 in. at Toccoa to only 0.10 in. at Griffin Experiment Station. Air temperatures for week 2 to 5° above normal.

Soil moisture 12% adequate, 39% short, 48% very short. Average days suitable for fieldwork 5.7. Main activities: Haying, planting, harvesting and spraying for insects and weeds. Corn 70% silked, 60% last year, average 77%; dough 40%, 19% last year, average 44%; dent 12%, 3% last year, average 15%; condition 21% good, 37% fair, 31% poor, 11% very poor. Cotton 100% planted, last year and average; squaring 58%, 65% last year, average 80%; condition 40% good, 52% fair, 6% poor. Peanuts 73% blooming, 71% last year, average 80%, 26% pegging, 25% last year, average 41%; condition 48% good, 41% fair, 9% poor. Soybeans 82% planted, 87% last year, average 58%, condition 35% good, 48% fair and 13% poor; blooming 1%, 2% last year, average 6%. Tobacco 7% harvested, 5% last year, average 12%; condition 54% good, 31% fair, 14% poor. Watermelons 10% harvested, 3% last year, average 18%; condition 20% good, 59% fair, 18% poor. Other small grains 39% good, 48% fair, 11% poor. Peaches 46% picked, 57% last year, average 52%; condition 53% good and 40% fair. Apples 46% good, 42% fair, 10% poor. Cattle 53% good, 40% fair. Hogs 61% good and 32% fair. Pastures 13% good, 49% fair, 28% poor, 8% very poor.

HAWAII: Weather conditions were variable, but most crops made favorable progress. Rainfall was light to moderate along the eastern coast of Hawaii Island benefitting crops there.

Most rainfall, however, fell in the higher elevations of all islands; away from agricultural fields where conditions remainded relative dry. Crops in the major vegetable areas continued to make normal progress under heavy irrigation. Insect populations have been increasing with the advent of warmer weather, and spray programs have intensified. Banana production seasonally light. Papaya production steady overall with some localized increases reported. Head cabbage production heavy as farmers supplying all the market needs. Chinese cabbage volume remains below a year ago. Head lettuce supplies will continue steady. Tomato output light and may decrease further in the next few weeks.

IDAHO: A low pressure system moved through the State causing varied amounts of precipitation and below normal temperatures. Heaviest amounts of rain were received in the north with departures ranging from 0.50 to 1.50 in. above normal. The southwest averaged 0.33 in. above normal, while the east ranged from 0.10 to 0.30 in. below normal. Temperatures averaged from 1 to 5° below normal statewide.

Crop growth improved as 6.8 days were suitable for fieldwork. Winter wheat advanced to 42% headed versus 62% in 1983 and 66% average. Spring wheat heading advanced to 20% compared to 12% last year and 29% average. Spring barley was 12% headed versus 14% in 1983. Potatoes progressed to 81% emerged compared to 90% last year and 88% average. Sugarbeet thinning was 87% complete versus 93% in 1983. The first cutting of alfalfa jumped to 45% harvested compared to 50% last year and the average. Corn emergence was the same as last year at 96%.

ILLINOIS: Temperatures 1 to 4° above normal. Precipitation 0.02 to 2.32 in.

Soil moisture 60% adequate, 2% surplus, 38% short. Days suitable for fieldwork: 6.0. Average height of all corn 20 in., last year 17 in., average 26 in. average. Height of most advanced fields 32 in., least year 27 in., average 38 in. Corn condition 12% excellent, 71% good, 16% fair, 1% poor. Soybeans planted 96%, last year 98%, average 96%. Soybean condition 2% excellent, 57% good, 39% fair, 2% poor. Wheat condition 8% excellent, 49% good, 39% fair, 4% poor. Winter wheat turning yellow 86%, last year 86%, average 94%; ripe 12%, last year 11%, average 42%. Oats headed 85%, last year 69%, average 83%; filled 45%, last year 35%, average 52%; turning yellow 12%, last year 7%, average 12%. Oat condition 8% excellent, 68% good, 22% fair, 2% poor. Sorghum grain planted 92%, last year 86%, average 88%. Alfalfa condition 28% excellent, 63% good, 9% fair; first crop cut 92%, last year 90%, average 94%; second crop cut 12%, last year 4%; average 14%. Red clover condition 23% excellent, 69% good, 8% fair; crop cut 80%, last year 79%, average 79%. Pasture condition 19% excellent, 62% good, 18% fair, 1% poor.

INDIANA: Average temperatures 2 to 6° above normal. Maximum temperatures upper 80s north and low to mid 90s elsewhere. Lows from 60 northeast to 70 southwest. Soil temperatures upper 70s to lower 80s. Precipitation mostly scattered thunderstorms soaking some fields while leaving others dry. Totals of 1.00 to 2.00 in. north and west central areas, 0.50 in. or less east central areas, 0.50 to over 3.00 in. south.

Fieldwork averaged 6.2 days. Topsoil moisture mostly short to adequate, subsoil moisture short to mostly adequate. Soybeans 99% planted, 1983 97%, average 94%. Soybeans 93% emerged, 1983 90%. average 93%. Soybeans 5 in. tall, 1983 4 in., average 5 in. Soybean condition fair to good. Corn 18 in. tall, 1983 14 in., average 20 in. Corn condition fair to mostly good. Wheat condition fair to mostly good. Wheat 60% turning color, 1983 55%, average 70%. Wheat 100% headed, 1983 100%, average 100%. Wheat 0% harvested, 1983 0%, average 0%. Alfalfa 98% cut first time, 1983 94%, average 88%. Clover hay 85% cut, 1983 75%, average 75%. Tobacco 85% set, 1983 85%, average 85%. Oats 70% headed, 1983 50%, average 75%.

IOWA: Temperatures near to slightly above normal; precipitation below average in all except northwest and north central districts.

Excessive surface water continues except in the northeast and east central districts. Days suitable for fieldwork: 2.9. Corn cultivated 39% complete 1st time; 65% last year, 74% normal. Corn crop condition 10% excellent, 42% good, 36% fair, 12% poor to very poor. Soybean planting 94% complete, 100% last year, 99% normal. Soybean emerged 89% complete, 96% last year, 95% normal; 16% soybean crop cultivated 1st time, 30% last year. Soybean crop condition 5% excellent, 44% good, 38% fair, 13% poor to very poor. Oat acreage headed 63% complete, 34% last year, 70% normal. Oat crop condition 11% excellent, 51% good, 29% fair, 9% poor to very poor. Winter wheat crop condition 10% excellent, 55% good, 24% fair, 11% poor to very poor. Hay crop condition 21% excellent, 48% good, 24% fair, 7% poor to very poor. First crop alfalfa harvested 58% complete, 81% last year, 88% normal. First cutting of clover 34% complete; 43% last year; 59% normal. Topsoil moisture supplies 71% surplus; 29% adequate. Subsoil moisture supplies 71% surplus; 28% adequate; 1% short. Livestock in generally good condition.

KANSAS: Precipitation averaged 2.00 to 3.00 in. northeast and east central, 0.75 to 1.00 in. north central, central and southeast and less than 0.25 in. elsewhere. Temperatures averaged 73° in the northwest to 79° southeast and south central. These were normal for the north central and 1 to 3° above normal elsewhere.

Wheat condition good to excellent except northwest. Moisture adequate generally and surplus east. Wheat 100% headed, 100% last year, 100% average; 4% harvested, 0% last year, 10% average. Light to moderate levels of take-all, tan spot, septoria and strawbreaker. Sorghum 85% planted, 75% last year, 80% average. Light to moderate levels greenbugs. Soybeans 85% planted, 80% last year, 70% average. Alfalfa second cutting 10% complete. Pasture and rangeland good to excellent. Days suitable for fieldwork: 4.5.

KENTUCKY: Another warm, humid week. Daily mean temperatures from 3 to 5° above normal. Precipitation averaged around 1.00 in. north to 1.50 in. south.

Days suitable for fieldwork averaged 5.5. Soil moisture 65% short, 33% adequate, 2% surplus. All crops need rain. Corn condition good to fair. Average height 18 in. advanced fields average 32 in. dry soils slowed growth. Soybeans 72% planted, 64% last year, 68% average condition good. Double crop planting will advance rapidly with small grain harvest. Need rain to avoid planting in dry soil. Burley tobacco fair to good condition, some reset. Over half plants under 6 in. tall only 10% over 12 in. Wheat 10% harvested, 5% last year, 33% average; yields good. Pastures dry. Hay harvest active, quality good.

LOUISIANA : Rainfall amounts ranged between none to 2.50 in. Average temperatures ranged from normal to 2° above normal. High 99°, low 66°.

Soil moisture adequate. Days suitable for fieldwork: 5.2. Activities included soybean and sweetpotato planting: hay, peach, and vegetable harvesting; and chemical applications. Rice headed 10% 1984, 2% 1983, 14% average; condition good. Corn silked 78% 1984, 55% 1983, 73% average; dough stage 40% 1984, 14% 1983, 30% average; mature 1% 1984, 1% 1983, 6% average; condition good. Cotton squaring 23% 1984, 20% 1983, 41% average; setting bolls 1% 1984, 0% 1983, 3% average; condition good. Soybeans planted 95% 1984, 84% 1983, 89% average; emerged 90% 1984, 77% 1983, 82% average; condition fair to good. Sorghum planted 100% 1984, 94% 1983, 92% average; emerged 100% 1984, 88% 1983, 86% average; headed 18% 1984, 5% 1983, 17% average; condition fair to good. Sweetpotatoes planted 89% 1984, 78% 1983, 90% average; condition good. Sugarcane condition fair. Wheat harvested 97% 1984, 93% 1983, 96% average. Vegetable condition fair to good. Peaches harvested 22% 1984, 22% 1983, 40% average. Hay first cutting 91% 1984, 79% 1983, 85% average. Livestock condition good. Pasture condition fair to good.

MARYLAND AND DELAWARE: Maryland: Weather returned to more seasonable temperatures and rainfall. Temperatures averaged 1 to 4° above normal in extreme west to 1 to 3° below normal elsewhere. Rainfall was quite varied with 1.10 in. falling in the west, 0.55 in. north central and southern and 1.15 in. on the Eastern Shore.

Wheat turned 90%, last year 90%. Oats turned 65%, last year 60%. Barley 60% harvested; 60% last year. Soybeans 75% planted, 1983 70%; average 80%. Tobacco planting 85% complete; 90% 1983; average 90%. Alfalfa hay 1st cutting 100%, last year 95%. Other hay 90% cut once; 80% 1983. Green pea harvest 60%, equal to last year.

Delaware: Rainfall during the week, mostly as scattered showers averaged 1.61 in., but ranged from 1.56 in. at Wilmington to 0.67 at Dover. Temperatures averaged 1 to 4° below normal.

Beneficial showers interrupted fieldwork but farmers were still able to work 6.0 days in their fields. Topsoil and subsoil moisture adequate. Small grains in good condition. Wheat turned 95%; equal to last year. Rye turned 75%; last year 90%. Barley harvest 65%; 90% last year. Soybean planting 75% complete, ahead of 1983's 70% but behind average 80%. First cutting alfalfa hay complete, 95% 1983. Other hay cut once 90%, last year 95%. Snap bean planting complete, one week later than last year. Lima bean planting 50%, over 3 weeks behind last year's progress. Pea harvest 60% combined, last year 45%.

MICHIGAN: This was a beautiful summer week across the State. Temperatures averaged 2° above normal. Precipitation was moderate over most of the lower Peninsula. The upper Peninsula, the south central portion of the lower Peninsula, and the southeast corner of the lower Peninsula had only light precipitation.

Fieldwork and haying active. Crops in generally good condition. Statewide 5.5 days suitable for fieldwork. Soil moisture supplies adequate throughout most of the State. Soybean planting 98% complete, 96% last year, 98% average. Dry beans 75% planted, 85% last year, 88% average. Winter wheat 95% headed, 95% last year 97% average. Oats 15% headed, 10% last year, 27% average. First cut hay 55% harvested, 55% last year, 62% average. Strawberries 30% picked, 25% last year, 43% average.

MINNESOTA: Temperatures averaged 1° below normal to 2° above normal. High: 86°; low: 40°. Precipitation averaged 2.12 in. above normal for southwest and from 0.64 in. below normal to 0.74 in. above normal elsewhere. Greatest reported weekly total: 5.05 in.

First crop hay damaged by water after cutting; much has spoiled. Loss of row crops due standing water, river flooding, and erosion confined to limited areas except in southwest corner, where more extensive flooding was common. Crops look very good in south central and southeast. Days suitable for fieldwork: 1.7. Topsoil moisture: 20% adequate, 80% surplus. Field corn condition: 56% poor to fair, 44% good to excellent. Soybean condition: 63% poor to fair, 37% good to excellent. Soybeans emerged 95%, 1983 94%, normal 95%. Jointing: Spring wheat 82%, 1983 70%, normal 69%; oats 78%, 1983 72%, normal 73%; barley 84%, 1983 71%, normal 69%. Heading: Spring wheat 22%, 1983 13%, normal 27%; oats 32%, 1983 15%, normal 31%; barley 34%, 1983 21%, normal 34%. Height: Field corn 14 in., 1983 10 in., normal 12 in.; soybeans 4 in., 1983 4 in., normal 5 in.

MISSISSIPPI: Temperatures 3 to 5° above normal, extremes 62 and 101°. Greatest weekly rainfall 3.10 in.

Soil moisture short. Fieldwork 5.9 days suitable, 2.5 1983, 4.4 average. Main activities: Cutting wheat, planting soybeans, and spraying for insects. Wheat condition good; 90% harvested, 42% 1983, 78% average. Hay harvest 37% completed; peach harvest 30%; watermelon harvest 3%. Soybean condition fair; 80% planted, 74% 1983, 84% average; 64% emerged, 58% 1983. Cotton fair; 45% squaring, 31% 1983, 53% average; 1% blooming, 0% 1983, 8% average; 0% setting bolls, 0% 1983, 3% average. Rice fair; 100% emerged, 98% 1983. Sorghum condition fair; 94% emerged; 1% heading. Corn fair; 40% silking, 17% 1983, 41% average; 16% dough stage; 5% dented. Sweet potato planting 82% completed, 83% 1983, 90% average.

MISSOURI: Temperatures averaged 4° above normal ranging from normal at Kansas City to 7° above normal at St. Louis. Precipitation on averaged close to 1 in. for the State keeping the Missouri River and most of its tributires above flood stage. The Mississippi River is also above flood stage along eastern Missouri.

Days suitable for fieldwork: 3.4. Cotton 49% squaring, 0% last year, 28% normal. Cotton setting bolls 0% this year, last year and normal. Grain sorghum planted 89%, 87% last year, 80% normal. Winter wheat headed 100% this year, last year and normal. Wheat harvested 15%, 11% last year, 18% normal. Soybeans planted 74%, 90% last year, 83% normal. Topsoil moisture supply 43% surplus, 47% adequate, 10% short. Pasture condition 12% excellent, 66% good, 12% fair, 19% poor. Condition of corn 2% excellent, 46% good, 49% fair, 3% poor. Condition of soybeans 1% excellent, 37% good, 52% fair, 10% poor. Condition of grain sorghum 1% excellent, 53% good, 34% fair, 12% poor. Condition of cotton 50% good, 25% fair, 25% poor.

MONTANA: Heavy rain fell over parts of west at midweek, over northeast later in week. Amounts ranged from 1.00 to 2.00 in. Elsewhere precipitation quite variable ranging less than 0.10 to 1.50 in. in some areas. Some severe weather noted over extreme east. Temperatures 1 to 5° below normal over western two-thirds of State, 1 or 2° above normal in eastern third.

Topsoil moisture adequate except in north central. Subsoil moisture short in north central, northeast, central and southeast, adequate elsewhere. Fieldwork: 4.7 days suitable. Oats in good condition throughout State. Wheat and barley good except in north central and northeast where fair. Winter wheat 5% pre-boot, 40% boot, 55% headed, last year 65% headed, average 55% headed. Spring wheat 60% pre-boot, 30% boot, 10% headed, last year and average also 10% headed. Barley 60% pre-boot, 35% boot, 5% headed. Oats 60% pre-boot, 30% boot, 10% headed. Alfalfa hay 10% harvested. Sugarbeets 30% thinned.

NEBRASKA: Widespread rain across State. Precipitation averaged 1.00 to 5.00 in. with flooding east. Temperatures ranged from normal to 2° above statewide.

Corn condition rated mostly good to fair. Winter wheat condition rated mostly fair to good, 40% of wheat turning color, 50% last year, 65% average. Less than 1% ripe, 1% last year, 4% average, 100% headed this year, last year and average. No wheat harvested this year, last year or average. Alfalfa rated mostly good to fair condition. First cutting 65% harvested, 80% last year, 91% average. Soybeans planted 90%, 100% last year, 100% average. Soybeans emerged 75%, 100% last year, 96% average. Sorghum planted 90%, 100% last year, 100% average. Sorghum emerged 70%, 100% last year, 96% average. Topsoil moisture was about half adequate and half surplus. Subsoil moisture was mostly adequate to surplus. Days suitable for fieldwork were 4.0.

NEVADA: Tropical moisture from south triggerd locally heavy thundershowers for western areas early in week. Midweek disturbance upper atmosphere moved into State brining rainshowers extreme north. South remained dry through week. Cool air mass followed disturbance into north sending temperatures averaging 5° below normal 21st and 22nd. Temperatures averaged near normal statewide. Extreme south averages slightly above normal.

Alfalfa hay harvest interrupted by thundershower north. Good progress south. Calving and lambing virtually complete, shearing nearly complete. General livestock condition good. Crops responding to warmer weather.

NEW ENGLAND: Precipitation averaged from between 1.00 and 2.00 in. over northern New England and less than 0.05 in. over southern New England. Average temperatures ranged from near 60° at the Canadian border to near 70° along the southern coast.

Potatoes 100% planted. Field corn 90% planted. Connecticut Valley shade tobacco 100% transplanted; outdoor tobacco 60% transplanted. Strawberry harvest active, excellent crop expected. Potato crop damage from heavy rain

still not known. Colorado potato beetle reported in Maine and heavy in Rhode Island. Haying active on fields dry enough for equipment.

NEW JERSEY: Temperatures averaged near normal. Extremes were 45° on the 22nd and 92° on the 20th. Weekly rainfall averaged 2.23 in. north, 0.70 in. central and 1.04 in. south. The heaviest 24-hour total was 2.76 in. on the 24th to 25th. Estimated soil moisture, in percent of field capacity, averaged 70% north, 51% central and 69% south. Four inch soil temperatures averaged 70° north, 72° central and 73° south.

Fieldwork: 6.0 days suitable. Main farm activities include planting early fall vegetables, baling hay, and harvesting early summer vegetables and strawberries. Planting of corn and soybean nearing completion. Most crops in good condition. Topsoil moisture supplies adequate.

NEW MEXICO: Temperatures slightly below normal. General rainfall across State.

Harvest activities slowed or stopped. Some alfalfa damaged. Milo planting slowed but well along. Crop conditions generally good. Range improving. Livestock continue moving to mountains. Cotton planted: 100%; last year 100%, average 100%. Cotton squaring: 17%; last year 1%; average 28%.

NEW YORK: Temperatures below normal. Rain early in the week.

First cut alfalfa 53% complete, 77% 1983, 36% average. Clover-timothy hay 31% cut, 59% 1983, 25% average. Grass silage 49% complete, 78% 1983, 44% average. Hay quality good, yields above average. Oats and wheat heading. Fruit sizing rapidly.

NORTH CAROLINA: Temperatures averaged near normal in the mountains and 1 to 2° above in the east. Precipitation amounts varied widely ranging from zero to 3.00 in.

Soil moisture: 14% very short, 50% short, 35% adequate, 1% surplus. Days suitable for fieldwork: 5.6. Condition: Corn 10% poor, 44% fair, 42% good, 4% excellent. Cotton 39% fair, 61% good. Peanuts 53% fair, 47% good. Soybeans 42% fair, 56% good, 2% excellent. Tobacco 2% poor, 52% fair, 46% good. Irish potatoes 29% fair, 58% good, 13% excellent. Peaches 18% fair, 61% good, 21% excellent. Plantings: Burley tobacco 98%, 1983 91%, average 96%; sorghum 83%, 1983 81%, average 85%; soybeans 82%, 1983 82%, average 82%; sweetpotatoes 88%. Harvested: Wheat 73%, 1983 55%, average 59%; oats 79%, 1983 55%, average 69%; barley 90%, 1983 63%, average 73%. Rye 73%, 1983 55%, average 67%. Peaches 24%, 1983 35%, average 24%. Irish potatoes 42%. Major farm activities: Harvesting small grains, planting soybeans, transplanting sweetpotatoes, cutting hay, cultivating tobacco and other crops, applying herbicides, and harvesting peaches, blueberries and vegetables.

NORTH DAKOTA: Mild week with moderate precipitation. Thunderstorms, a few with hail and strong winds, caused some damage across the souhern half of the State. Temperatures ranged from 1° above normal west central and southwest to 4° above normal northeast. The extremes were 93° on 21st and 36° on 18th. Precipitation ranged from around 0.33 in. north central and northeast to 2.00 in. southwest.

The 1984 planting season complete. All crops rated mostly good to very good condition. Soil moisture adequate or better for 90% of State, exceeding last year and average considerably. Development of small grains at or slightly behind average pace. Percent of crop at boot stage or beyond compared to last year and average (1979-83); Spring wheat 34, 28, 34; durum 20, 17, 25; oats 32, 32, 35; barley 40, 39, 42. Row crop development at or above average. Average height in inches compared to last year and average; Corn 9, 8, 5; sunflower 5, 6, 5; soybeans 5, 5, 8; potatoes 8, 6, NA; dry beans 5, 6, 3. Some reported loss of potatoes due to high water.

OHIO: Temperatures averaged 3 to 4° above normal southeast, 1 to 3° above normal elsewhere. Extremes from upper 40's to mid-90's. Precipitation totals variable from 0.40 to over 3.00 in.

Soil moisture 67% short, 28% adequate, 5% surplus; 6.0 days suitable for fieldwork. Main activities included planting and replanting soybeans, cutting hay, cultivating. Corn fair to good condition, average 6 leaves fully emerged. Soybeans planted 98% 1984, 99% 1983, 90% average; emerged 85% 1984; condition fair. Winter wheat headed 98% 1984, 99% 1983, 100% average; ripe 10% 1984, 10% 1983, 5% average; condition fair to good. Pasture condition fair to good.

OKLAHOMA: Temperatures averaged 1° above normal Panhandle to 5° above normal northeast, south central and southeast. Precipitation averaged 0.24 in. Panhandle to 1.09 central.

Intermittent showers interrupted wheat harvest northwest. Despite precipitation in major wheat producing districts, harvest reached 65% completion. Harvest essentially complete southwest. Cheat causing heavy dockage north central. Dry conditions southwest caused cotton producers to "dust in" seed while some growers may switch to alternative crops. Chinch bugs becoming serious problem to sorghum northeast. Wheat harvested: 65%; 25% 1983, 50% average. Sorghum planted: 90%; 70% 1983; 85% average. Cotton squaring: 0%; 0% 1983; 0% average.

OREGON: Week began dry, but on 20th precipitation began on coast and moved inland. By 22nd rain had passed out of State. Rainfall amounts: 0.50 in. along coast; up to 1.90 in. in Willamette Valley; less than 0.40 in. elsewhere. Temperatures were 2 to 4° below normal.

Winter wheat condition good to excellent for entire State. Bumper crop expected. Crop 95% headed, 99% in 1983, 96% average; none harvested. Heavy rains good for wheat, but shut down hay cutting by midweek, causing damage to down hay. Dryland wheat and barley turing color. Soil moisture: Surplus in west, adequate in east. Strawberries in full harvest, look good. Cranberries in mid-bloom, raspberries turning color one week from harvest, blueberries two weeks. Cherry harvest near, trouble with splitting. Spraying for fruit fly. First cover spray applied to apple and pear orchards. Warm, dry weather helped vegetable growers catch up on planting of potatoes, snap beans and sweet corn. Growth in vegetable crops good. Tomatoes suffer from blight. Asparagus yields light, harvest winding down. Onions in Hermistorn look good. Central areas potato seeding complete, one-forth emerged. Conditions of livestock, range and pasture generally good statewide. In southwest, some drying up. In central area cool summer has limited grass growth, the east has benefitted from above average moisture levels. Shipments of lambs in southwest, weights below normal.

PENNSYLVANIA: Early week rather wet and cool. Reminder dry and normal. Average temperature was 60° with no departure. Average precipitation was 2.10 in. and nearly 1.20 in. above normal.

Days suitable: 5.0. Moisture adequate to surplus. Activities: Planting soybeans, tobacco; making hay, haylage; spraying and sidedressing corn; spraying potatoes; harvesting strawberries, green peas, early cherries. Tobacco transplanting 82% complete, last year 84%. Soybeans 83% planted, last year 82%. Corn planting virtually complete, same as last year and average. Barley 22% headed, 51% turning yellow, 19% ripe, last year 41% headed, 42% turning yellow, 12% ripe. Wheat 63% headed, 30% turning yellow, last year 72% headed, 20% turning yellow. Average corn height 10 inches, last year 9 inches. First cut alfalfa 71% complete, last year 69%. First cut clo-tim 53% complete, last year 55%. Quality of hay mostly fair to good. Feed from pastures mostly average to above average.

PUERTO RICO: Island average rainfall 1.31 in. or 0.07 in. below normal. Highest weekly total 5.46 in. Highest 24-hour total 2.03 in. Temperature averaged about 81° on coasts and 76 to 75° interior divisions. Mean station temperature ranged from 66.7 to 82.6°. Extremes 94 and 58°.

SOUTH CAROLINA: First half hot, dry with temperatures up to 100° in midland and south. Clear skies, low humidities produced high evaporation rates. Front pushed southward 20th bringing scattered thundershowers over north. Rainfall localized, some spots had downpours of several inches. Thundershowers 21st through 24th. Some localities received little rainfall, but temperatures were lower.

Soil moisture short to adequate. Days available for fieldwork: 5.2. Corn condition fair, rains beneficial. Cotton condition fair to good; 43% squaring, 77% last year, 79% average. Soybean planting continues; 79% planted, 83% last year, 86% average. Wheat condition good; 91% harvested, 76% last year; 84% average; 99% ripe; 96% last year, 100% average. Tobacco condition fair to good. Peach harvest progressing smoothly 18% harvested; 15% last year; 21% average. Cantaloup and watermelon harvesting continues. Small grains harvest winding down.

SOUTH DAKOTA: Average temperatures were 1 to 6° above normal. Extremes: 96 and 45°. Up to 4.66 in. of rain fell across the State.

Days suitable for fieldwork: 1.0. Topsoil moisture was surplus over most of the State. The northwest and southwest reported adequate supplies as well as the extreme northeast corner. A small portion of the south central part of the State reported a shortage. Flooding has been a major problem for most of the southeast. Spring wheat headed 19%, 1983 31%, average 49%. Sorghum planted 60%, 1983 92%, average 94%. Winter wheat headed 78%, 1983 85%, average 95%. Winter wheat harvested 0%, 1983 0%, average 0%.

TENNESSEE: Hot weather prevailed throughout the State as a high pressure system dominated the weather early in the week. A weak frontal system crossed the State near the end of the week, and a cold front moved through the State on 24th. Temperatures averaged about 5° above normal in the west and near normal in the east with maximums in the upper 90's. Precipitation was spotty and varied from light showers to 2.00 in. in some areas.

Farmers averaged 5.6 days of fieldwork. Soil moisture: 3% surplus, 16% adequate, 81% short. Corn tasseling: 3%, 1983 2%, average 6%. Cotton squaring: 12%, 1983 7%, average 26%. Soybeans planted: 77%, 1983 69%, average 79%. Sorghum planted: 78%, 1983 NA, average NA. Tobacco set: 93%, 1983 94%, average 94%. Wheat ripe: 92%, 1983 82%, average 85%. Wheat harvested 45%, 1983 25%, average 50%. Alfalfa hay - 2nd cutting; 51%, 1983 28%, average 54%. Pastures and livestock in good condition.

TEXAS: Weak cold front moved across Panhandle, became stationary stretching from Red River Valley, South Plains into Big Bend. Front triggered scattered showers, thunderstorms West Texas, few widely scattered showers parts South, Southeast Texas. Hot, dry conditions remainder State. Temperatures averaged near normal, except 2 to 3° above normal Low Plains, north central, East Texas. Trans-Pecos. 5° below normal. Rainfall below normal across much State, except High Plains, normal amounts received, and Trans-Pecos, 1.00 in. above normal.

Crops: Rain showers continue, good growth in the High and Low Plains, Trans-Pecos. Planting dryland fields Plains remains slow; should pick up with increased moisture. Sorghum planting dryland fields picked up southern High Plains due recent good rain showers. Planting remains slow northern High Plains. Planted fields making good growth, irrigation needs reduced. Low Plains, Cross Timbers, outlook not good. Most fields planted; however, growth poor. Scattered areas fair. Blacklands, spraying midge, spider mites. Rain needed. CentralTexas, sorghum turing color. Rain needed. South Texas, harvest beging soon, crop maturing rapidly. Harvest continues Rio Grande Valley, better yields. Corn growing rapidly High Plains after recent showers, most stalks 3 to 5 feet tall. Excellent growth should continue. Elsewhere, outlook not good. Drier conditions some wilting. Fair to poor yields expected. Statewide corn condition rated 69% of normal compared with 81% last year. Wheat harvest dryland fields begun small basis northern High Plains. Harvest irrigated fields begin a week or so after dryland. Harvest winding down southern High Plains, Low Plains, Low yields reported. Current condition 60% of normal compared with 85% a year ago. Reported conditions 6% excellent, 22% good, 47% fair and 25% poor. First bale 1984 cotton harvested in United States picked June 20 Rio Grande Valley of Texas. Good quality reported this bale. Harvest this area begin larger scale two or three weeks. Good quality reported this bale. Harvest this area begin larger scale two or three weeks. Good growth Plains, early fields squaring. Light bollworm infestations Cross Timbers. Fields Blacklands setting bolls, some spider mite problems also. Trans-Pecos, fields making good growth. Additional rain needed South Texas help bolls further develop. Cultivation active Central Texas. Rice good growth, heading continues. Some fertilization begun. Peanut planting slow many areas due dry conditions. Acreage expected down some areas due producers not able to get crop planted. Planted fields emerging heavy irrigation.

Cotton planted 97% 1984, 97% 1983, 98% average; squaring 21% 1984, 11% 1983, 20% average; setting bolls 9% 1984, 5% 1983, 11% average. Rice headed 9% 1984, 5% 1983, 30% average. Sorghum planted all purposes 96% 1984, 92% 1983, 95% average; headed headed 52% 1984, 52% 1983, 53% average; turning color 35% 1984, 28% 1983, 31% average; mature 18% 1984, 1% 1983, 7% average; harvested for grain 2% 1984, 0% 1983, 0% average. Wheat turning color 100% 1984, 93% 1983, 96% average; harvested for grain

61% 1984, 45% 1983, 52% average. Oats harvested for grain 78% 1984, 71% 1983, 75% average. Peanuts planted 75% 1984, 77% 1983, 78% average. Soybeans planted 93% 1984, 71% 1983, 75% average. Sunflowers planted 89% 1984, 82% 1983, 78% average.

Commercial vegetables: Rio Grande Valley, harvest, fieldwork slowed due intermittent rain showers. Activities begin again this week. San Antonio-Winter Garden, cantaloup harvest begun. Yields good. Onion, cucumber harvest continues. Trans-Pecos, onion harvest met slight delays due much-needed rain. Slight damage cantaloup blooms from rain. East Texas, good supplies beans, squash, peppers, tomatoes, onion. High Plains, rain showers helped relieve steady irrigation onions, potatoes, carrots. Harvest potatoes in Know-Haskell area continues. Harvest early Peaches continues; however, picking winding down. Later varieties fair sites. Ripening picked up due warmer, drier conditions. Pecan development slow due dry conditions. Preparation second spraying casebearers. Some droppage continues.

Range and livestock: Improvement ranges, pastures good across Plains due recent rains. Trans-Pecos also improving. Low Plains, Cross Timbers still moisture stressed. First cuttings hay continue, low yields reported. Fertilization pastures Central Texas. Shipping livestock continues, markets remain good.

UTAH: Recurring thunderstorm and shower activity deposited light to heavy precipitation north central division, light to moderate western division, and light amounts at isolated stations over rest of State. Division temperatures averaged normal to 1° below normal. Individual stations ranged 3° above to 3° below.

Days suitable for fieldwork: 6.6. Winter wheat 85 to 90% heading; barley 35%; spring wheat 25%; oats 10%. Alfalfa hay fist crop 50% complete. Range feed, corn, apples and tart cherries all in good condition. Cattle and sheep in good to excellent condition. Mostly on summer ranges.

VIRGINIA: Generally dry except 24th. Cold front moved eastward causing widespread precipitation. Amounts heaviest in west with some in excess of 1.00 in. Central division reached only around 0.10 in. with less than 0.50 in. in east. Temperatures mainly in low to upper 80's with a few readings in low 90's. Lows ranged from 50's to upper 60's. Humidity low during most of period with generally light winds.

Topsoil moisture conditions were 87% short, 13% adequate. There were 5.8 days suitable for fieldwork. Some crops beginning to feel effect of dry, hot weather. Corn crop in fair condition. Little silk reported. Soybean planting 74% complete, 69% last year, 75% average. Condition fair to good. Dry soils hampering no-till plantings. Peanut stands in good condition overall. Burley tobacco setting 96% complete. All tobacco condition good, although some irrigation necessary. Apple and peach condition good but moisture needed for sizing. Hay fields and pasture condition fair to good. Hay yields reported short in some areas. Rain needed. Oat harvesting 37% complete, 38% last year, 29% average. Barley harvesting 77% complete, 75% last year, 74% average. Wheat combining 28% complete, 24% last year, 34% average. Wheat and oat yields appear normal, barley yields above. Potato condition good.

WASHINGTON: The week slightly cooler than normal and considerably wetter than normal in most localities. High pressure with cool dry air dominated State weather pattern first three days of week. But an upper level system brought considerable cloudiness and rain to much of State as it slowly drifted over State between 19th and 21st. Rainfall pattern sharply divided between heavy amounts and no rain at all. Warm and dry conditions returned to State on 22nd.

Development of State's winter wheat crop remains behind normal, however crop in excellent condition. Stripe rust retarded by warm, dry weather but has reduced yield prospects some wheat fields. Heavy rains during week slowed haying operations many areas. Strawberry harvest in full swing. Raspberry harvest just beginning. Cherry harvest Chelan county off to slow start due to weather. Harvest of broccoli and cauliflower about 2 week's away. Harvesting of spinach and other leafy vegetables continues. Eastern growing areas, asparagus harvest nearly complete and green pea harvest has begun. Ranges and pastures in good condition most areas and have benefitted from warmer weather. Dairymen continue to green chop and bale hay as weather permits. Livestock on pasture and in good condition. Winter wheat headed 73% 1984, 100% 1983, 95% average. Winter wheat harvested 0% 1984, 0% 1983, 0% average.

WEST VIRGINIA: Temperatures averaged 4 to 7° above normal except for the northeast where temperatures averaged only 2° above normal. High of 96° reported in Martinsburg, low of 45° in Canaan Valley. Much needed rain fell across the State with many areas receiving over 1.00 in. Terra Alta received the most precipitation 2.26 in., while Franklin had no rainfall during the week.

Soil moisture short to very short. Days suitable for fieldwork 4.9. Main activities: Harvesting hay and gardening. Feed supplies adequate to short.

WISCONSIN: Heavy rains ended by the 18th with mild and dry weather through midweek. More rain fell from the night of the 21st into the 23rd with scattered showers over north the 24th. South and west received the most rain. Highs were mostly in the 70's and 80's, lows in the 50's and 60's.

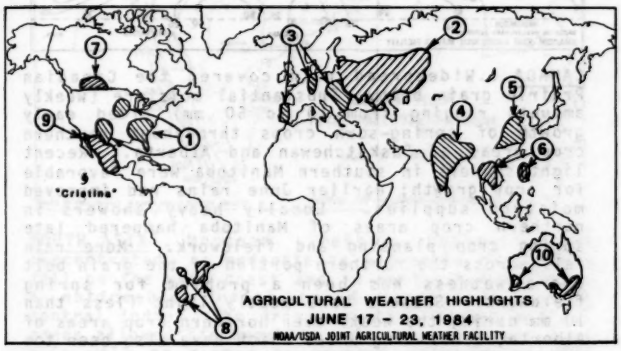
Hay making remained difficult because of poor drying weather and soggy fields, though the hay was growing well. Those who had cut the first crop early will soon cut a fast growing second crop. Those who had not cut the first crop early are now much delayed. There were 3.9 days suitable for fieldwork. Soil moisture was 1% short, 43% adequate and 56% surplus. First cut hay was 50% harvested compared with 54% last year and average of 61%. Height of corn was 12 in. compared to 8 last year and an average of 14 in. Strawberry harvest in full swing with an excellent crop expected.

WYOMING: Most temperatures 1 to 6° above normal. Highs mid 70's to 95°. Lows 34° to mid 50's. Precipitation below normal except eastern part.

Topsoil moisture adequate 67% State. Subsoil moisture adequate 82% State. Days suitable for fieldwork: 6.0. Winter wheat 25% boot, 40% headed, last year, 35% boot, 50% headed. Barley 30% boot, 15% headed, last year; 25% boot, 20% headed. Spring wheat 10% boot, 5% headed. Oats 15% boot, last year 20% boot. Small grains developing later than last year. Sugarbeets 80% thinned compared to 65% year ago. Alfalfa; first cutting 5% complete, year ago 15%. Small amount other hay harvested. Eighty-five percent range livestock moved to summer ranges.

International Weather and Crop Summary

June 17 to 23



HIGHLIGHTS:

1. UNITED STATES ... Beneficial showers across the Southeast relieve most of the stress on corn, and spur planting of soybeans. Continued rains over the western Corn Belt delay replanting of crops. Dryness increases over Central Texas while rains continue benefiting High Plains cotton.

2. USSR ... Light showers bring some relief to crops in the eastern Ukraine, northern North Caucasus, and eastern Black Soils which were stressed by earlier dryness. Showers continue to benefit crops in western and northern European crop areas. In the New Lands, wet weather benefits spring wheat in the east. Generally dry weather covers wheat in the southwest.

3. EUROPE ... Showers create possible harvest delays in western crop areas of the Iberian Peninsula. Wet weather is unfavorable for winter grain maturation in West Germany. Showers benefit corn in France, Poland, Czechoslovakia, Hungary, and much of the southeast.

4. SOUTH ASIA ... Drier weather through much of central India will not harm early growth of summer crops if rains return. Localized flooding likely damages rice along the west coast and in the northeast.

5. EASTERN ASIA ... Dry weather benefits the recently flooded central area. Rain slows wheat harvesting in the North China Plain but favors summer crops.

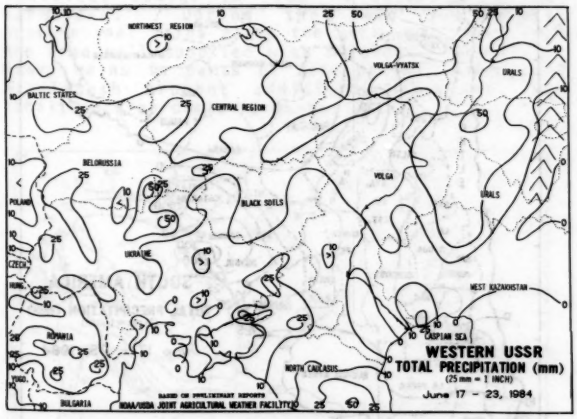
6. SOUTHEAST ASIA ... Drier weather returns to central-western Thailand but moisture is adequate for most rice and corn. Localized flooding in the northern Philippines likely damages some rice areas.

7. CANADA ... Widespread showers benefit early crop growth across the southern Prairie grain belt, but keep fields too wet in northern crop areas of Manitoba. Lighter rain benefits crop areas in northern Alberta which had been too wet.

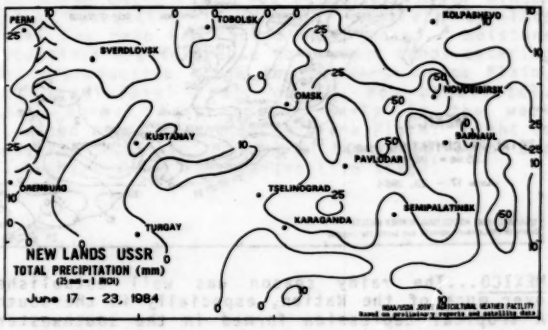
8. SOUTH AMERICA ... Heavy rain causes additional flooding of crop areas in Rio Grande do Sul but dry weather aids Brazil's coffee harvest. In Argentina, generally favorable weather helps late harvesting of cotton and soybeans, and wheat planting in the south. Moisture is limited for wheat planting in Cordoba.

9. MEXICO ... Rainy season moisture benefits corn, sugarcane, and coffee in central and southern areas, and improves irrigation supplies for west coast crops.

10. AUSTRALIA ... Deficient moisture is limiting planting and establishment of wheat over the southern two-thirds of New South Wales and Victoria. Mid-June showers in Queensland, northern New South Wales, and portions of South Australia stimulate planting while periodic rain in the west aids late stages of crop planting.

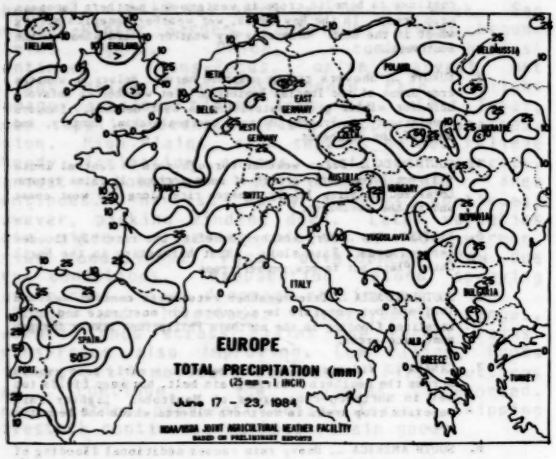


USSR...Wet weather continued to provide abundant moisture for crops in the southern Baltic States, the western portion of the Central region, Belorussia, the western half of the Ukraine, and the western Black Soils Zone. Crops in these areas should be in good condition with winter grains in the filling stage in southern crop areas, and spring grains in the early heading stage. In the west-central Ukraine and western Black Soils, continued excessive rains have created conditions conducive for crop lodging. Further east, light showers brought some relief from unfavorable dryness in the eastern Ukraine, northern North Caucasus, eastern Black Soils, and the south-central portion of the Volga Valley. The moisture benefited winter grains in the late filling stage and spring grains in the flowering stage in the south. Elsewhere, wet weather in the upper Volga Valley, Volga Vyatsk region, and western Urals reversed a below-normal precipitation pattern. Below-normal temperatures reduced evaporation rates in most crop areas of Western USSR.

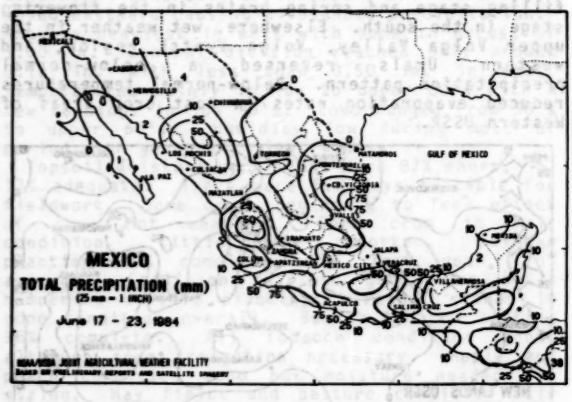


In the New Lands, spring wheat is in the jointing stage and the crop is progressing normally. Showers during the growing season have provided abundant moisture for wheat growth in areas east of a line which bisects Omsk. Historically, these areas account for 30 percent of spring wheat production. Wheat areas in Central Kazakhstan,

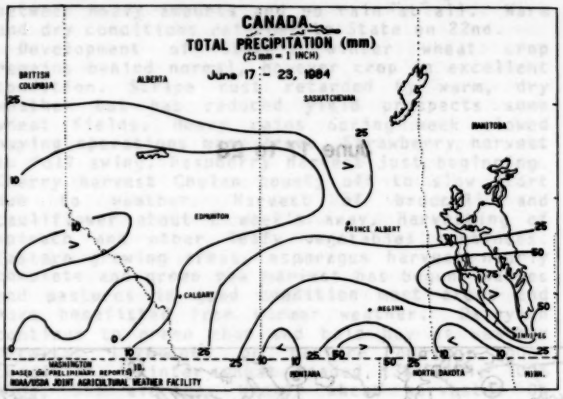
which historically produce 20 percent of the spring wheat crop, have been drier than those further east. However, the rains have been timely and crop conditions are favorable. Showers and cool temperatures will be required during reproduction and grain filling to maintain favorable yield prospects for the spring wheat crop.



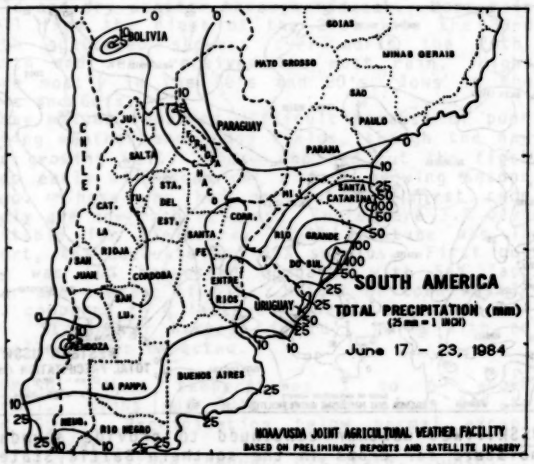
EUROPE...Showers returned to winter grain areas in Portugal and western Spain, creating possible harvest delays. Wet weather across much of West Germany is providing unfavorable conditions for maturing winter crops. However, spring grains, in the reproductive stage, are likely benefiting from the abundant moisture. Crop lodging may be a problem in some areas. Light showers maintained adequate soil moisture conditions for crops in East Germany, Poland, Czechoslovakia, and Hungary. Elsewhere, showers continued to benefit summer crops in southeastern Europe, but some delays in the winter grain harvest may have resulted. In southern France, light showers continued a favorable moisture pattern in major corn producing areas.



MEXICO...The rainy season was well established over much of the Nation, especially in the south. A tropical depression formed in the southwestern Gulf of Mexico and moved inland at Tampico, triggering heavy rains. Rejuvenated Tropical Storm Boris and Hurricane Cristina remained well offshore of the southern Mexican coast, but generated some rain inland. The moisture aided development of corn and dry beans in the southern Plateau corn belt, sugarcane and coffee along the central east coast, and improved irrigation supplies for west coast field crops. Abundant sunshine favored harvesting of grain sorghum and corn in the upper northeast, and development of cotton in north-central and northwest areas.

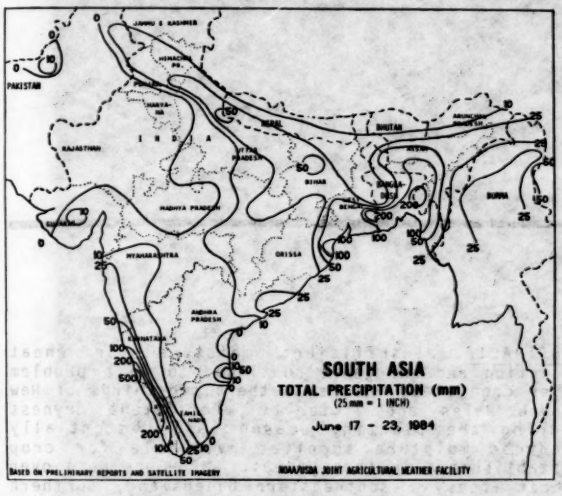


CANADA...Widespread rain covered the Canadian Prairie grain belt. Substantial moisture (weekly amounts ranging from 10 to 50 mm) aided early growth of spring-sown crops throughout southern crop areas of Saskatchewan and Alberta. Recent light showers in southern Manitoba were favorable for crop growth; earlier June rains had improved moisture supplies. Locally heavy showers in northern crop areas of Manitoba hampered late spring crop planting and fieldwork. More rain fell across the northern portion of the grain belt where wetness has been a problem for spring fieldwork. Showers were mostly light (less than 10 mm during the week) over northern crop areas of Alberta, benefiting areas which have also been too wet. In general, conditions improved for spring-sown crops, now mostly in the vegetative growth stage.

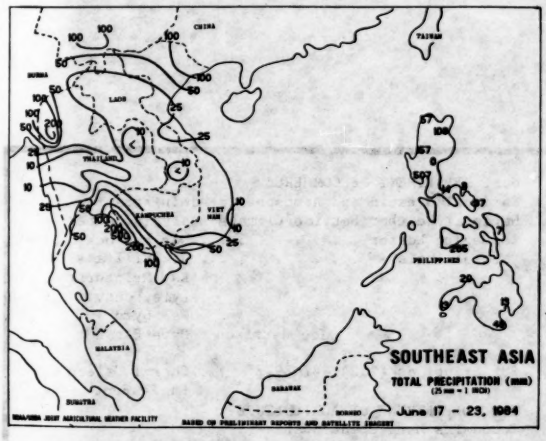


SOUTH AMERICA...More rain fell over Rio Grande do Sul, keeping Brazil's southernmost state saturated. Frequent heavy showers have flooded wheat areas. Dry weather aided crop development in Parana, the other major wheat producing state, following mid-June's beneficial rains. Dry weather also aided Brazil's coffee harvest. In Argentina, mostly light showers (weekly rainfall of less than 10 mm) allowed late harvesting of

cotton in the north, and soybeans in Santa Fe, Cordoba, and northern Buenos Aires. Recent heavier showers throughout the wheat areas of eastern La Pampa and southern Buenos Aires aided planting and emergence of winter wheat. Wheat planting follows the soybean harvest in Santa Fe, Cordoba, and northern Buenos Aires. Unfavorable dryness exists for wheat planting in Cordoba, a province which normally produces about 15 percent of Argentina's wheat crop.


SOUTH ASIA
TOTAL PRECIPITATION (mm)
(25 mm = 1 INCH)
June 17 - 23, 1984
BASED ON PRELIMINARY REPORTS AND SATELLITE IMAGERY
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

SOUTH ASIA...Monsoon rains became more concentrated, as moderate to extremely heavy rain fell on the west coast and in northeastern India. A noticeable drying trend developed through central India. The drier weather through central areas allowed fieldwork to progress, although more rain will be needed to support recently planted rice, cotton, and groundnuts. Inundative rain, greater than 500 mm, likely caused flooding and localized damage to rice in southern coastal Karnataka. During the past few weeks, above-normal rains along the west coast have kept the area well supplied with moisture. Similarly, heavy rains in parts of West Bengal, Assam, and Bangladesh brought additional moisture, but localized crop damge is suspected.


SOUTHEAST ASIA
TOTAL PRECIPITATION (mm)
(25 mm = 1 INCH)
June 17 - 23, 1984
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
BASED ON PRELIMINARY REPORTS AND SATELLITE IMAGERY

SOUTHEAST ASIA...Highly variable monsoon rains fell throughout Indochina. Much of Laos and Vietnam continued a recent drying trend. The dry weather extended through central Thailand and northern Kampuchea. The dry conditions were unfavorable for part of the western Thai corn area which has received below-normal precipitation. Generally adequate moisture exists in the remaining crop areas. The corn crop is nearing the reproductive stage and will require frequent showers to maintain a favorable moisture supply. Moderate to heavy rain was mostly beneficial for rice in northern Thailand, but some localized flooding was suspected. Extremely heavy rain, greater than 500 mm, caused flooding along the Thai-Kampuchea border. Heavy rain also fell in localized areas of Luzon, Philippines, possibly damaging the rice crop.

EASTERN ASIA...Beneficial drying occurred in central China, following recent heavy rain and flooding. Cotton, corn, and soybeans are in the reproductive stage along the Yangtze Valley and are well supplied with moisture. Moisture conditions continue to be good in the southern rice region. Early rice is in the grain filling stage, and intermediate rice is in the heading stage. A band of moderate to heavy rain, 25-75 mm, from Jiangsu through Shanxi was unfavorable for wheat harvesting. However, the remainder of the North China Plain was relatively dry. Winter wheat harvesting is normally complete by late June, but rain has caused some delays. Moisture conditions are favorable for summer crops entering the reproductive stage in the North China Plain, but additional rain will be beneficial. Above-normal temperatures early in the week stressed crops in the North China Plain. Light to moderate rain in Manchuria benefited corn and soybeans nearing the reproductive stage.

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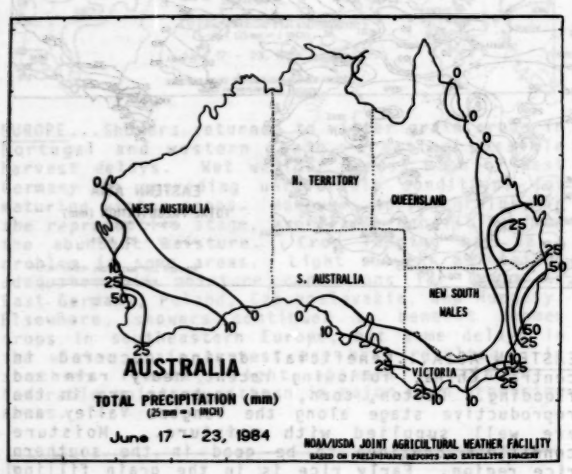

AUSTRALIA...Insufficient moisture for wheat planting and emergence continued to be a problem over crop areas in the southern two-thirds of New South Wales and Victoria. Persistent dryness during the planting season has substantially reduced moisture supplies available for crop establishment in these areas. Mid-June rain over wheat areas of southeastern Queensland, northern New South Wales, and portions of South Australia brought much needed moisture, stimulating crop planting and aiding emergence. Moisture is limited, however, and dry weather recently returned. In Western Australia, light showers fell over northern crop areas and more substantial rain covered southern areas. Periodic showers in the west have moistened soils sufficiently to complete over 80 percent of wheat planting.

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